

| L Number | Hits | Search Text | DB | Time stamp |
|----------|------|---|----------|-----------------|
| 1 | 64 | (((514/85,86,89,92,94,95,99,110,113,114,118,120,124,125,126,130,134,132,135,138,141).CCLS.) ((562/8,10,11,15,16,23,24,25).CCLS.) ((558/80,81,83,178,179,190,193,194,195,199,215,216).CCLS.) ((544/243,337).CCLS.) ((546/21).CCLS.) ((548/111).CCLS.) ((549/6,216).CCLS.)) and (FBP? OR fructose) and phosphon\$ | US-PGPUB | 2004/8/25 13:54 |

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| | | |
|--------------|----|---|
| NEWS | 1 | Web Page URLs for STN Seminar Schedule - N. America |
| NEWS | 2 | "Ask CAS" for self-help around the clock |
| NEWS | 3 | May 12 EXTEND option available in structure searching |
| NEWS | 4 | May 12 Polymer links for the POLYLINK command completed in REGISTRY |
| NEWS | 5 | May 27 New UPM (Update Code Maximum) field for more efficient patent SDIs in CAplus |
| NEWS | 6 | May 27 CAplus super roles and document types searchable in REGISTRY |
| NEWS | 7 | Jun 28 Additional enzyme-catalyzed reactions added to CASREACT |
| NEWS | 8 | Jun 28 ANTE, AQUALINE, BIOENG, CIVILENG, ENVIROENG, MECHENG, and WATER from CSA now available on STN(R) |
| NEWS | 9 | Jul 12 BEILSTEIN enhanced with new display and select options, resulting in a closer connection to BABS |
| NEWS | 10 | Jul 30 BEILSTEIN on STN workshop to be held August 24 in conjunction with the 228th ACS National Meeting |
| NEWS | 11 | AUG 02 IFIPAT/IFIUDB/IFICDB reloaded with new search and display fields |
| NEWS | 12 | AUG 02 CAplus and CA patent records enhanced with European and Japan Patent Office Classifications |
| NEWS | 13 | AUG 02 STN User Update to be held August 22 in conjunction with the 228th ACS National Meeting |
| NEWS | 14 | AUG 02 The Analysis Edition of STN Express with Discover! (Version 7.01 for Windows) now available |
| NEWS | 15 | AUG 04 Pricing for the Save Answers for SciFinder Wizard within STN Express with Discover! will change September 1, 2004 |
| NEWS EXPRESS | | JULY 30 CURRENT WINDOWS VERSION IS V7.01, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004 |
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| NEWS LOGIN | | Welcome Banner and News Items |
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* * * * * STN Columbus * * * * *

09/801,933

Thomas McKenzie

FILE 'HOME' ENTERED AT 18:27:35 ON 25 AUG 2004

=> file reg

FILE 'REGISTRY' ENTERED AT 18:27:44 ON 25 AUG 2004

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STRUCTURE FILE UPDATES: 24 AUG 2004 HIGHEST RN 732209-96-0

DICTIONARY FILE UPDATES: 24 AUG 2004 HIGHEST RN 732209-96-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

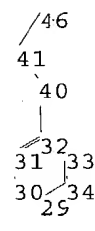
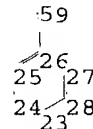
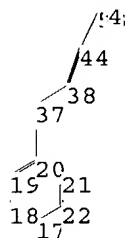
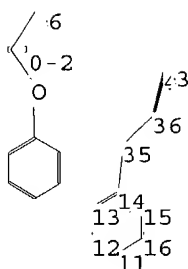
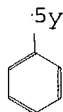
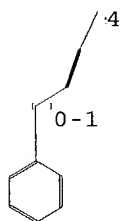
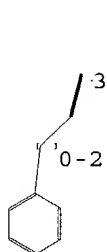
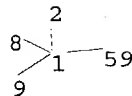
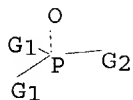
Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

Uploading C:\Program Files\Stnexp\Queries\dummy.str

c¹
r²

c¹
r²



chain nodes :

2 35 36 37 38 39 40 41 42 43 44 53 59

ring nodes :

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
32 33 34

ring/chain nodes :

1 3 4 8 9

chain bonds :

1-2 1-59 14-35 20-37 26-39 32-40 35-36 36-43 37-38 38-44 40-41 41-42
44-53

ring/chain bonds :

1-8 1-9

ring bonds :

11-12 11-16 12-13 13-14 14-15 15-16 17-18 17-22 18-19 19-20 20-21 21-22
23-24 23-28 24-25 25-26 26-27 27-28 29-30 29-34 30-31 31-32 32-33 33-34

exact/norm bonds :

1-2 1-8 1-9 1-59 26-39 32-40 40-41

exact bonds :

14-35 20-37 35-36 36-43 37-38 38-44 41-42 44-53

normalized bonds :

11-12 11-16 12-13 13-14 14-15 15-16 17-18 17-22 18-19 19-20 20-21 21-22
23-24 23-28 24-25 25-26 26-27 27-28 29-30 29-34 30-31 31-32 32-33 33-34

isolated ring systems :

containing 11 : 17 : 23 : 29 :

09/801,933

Thomas McKenzie

G1:[*1],[*2]

G2:[*3],[*4],[*5],[*6]

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 8:CLASS 9:CLASS 11:Atom 12:Atom 13:Atom
14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom
23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom
32:Atom 33:Atom 34:Atom 35:CLASS 36:CLASS 37:CLASS 38:CLASS 39:Atom
40:CLASS 41:CLASS 42:CLASS 43:CLASS 44:CLASS 53:CLASS 59:CLASS

Generic attributes :

39:

Saturation : Unsaturated

Number of Carbon Atoms : less than 7

Type of Ring System : Monocyclic

Element Count :

Node 39: Limited

C,C3-5

O,O0-1

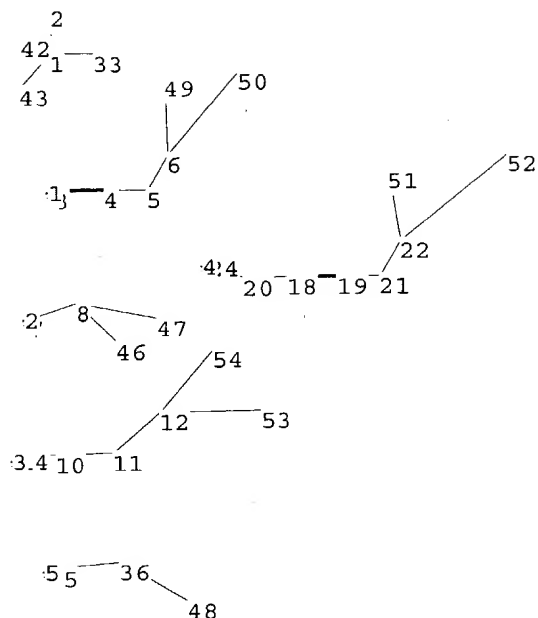
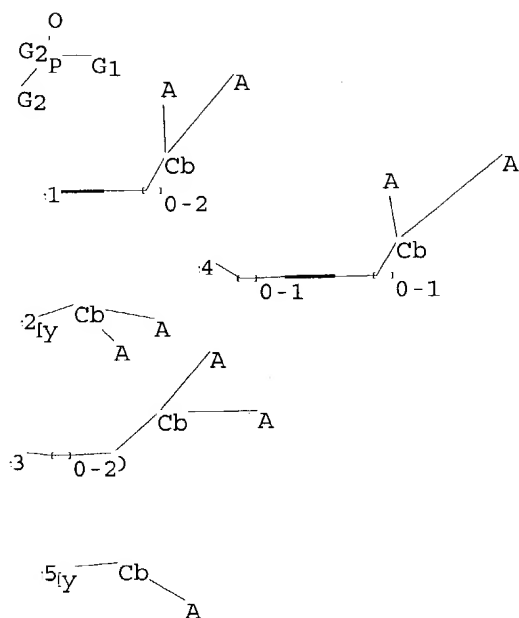
N,N0-2

S,S0-1

L1 STRUCTURE UPLOADED

=>

Uploading C:\Program Files\Stnexp\Queries\09801933.str

C⁶
N⁷C⁶
N⁷

chain nodes :

2 3 4 5 6 7 8 10 11 12 14 18 19 20 21 22 24 33 35 36 46 47 48
49 50 51 52 53 54

ring nodes :

1

ring/chain nodes :

38 39 42 43

chain bonds :

1-2 1-33 3-4 4-5 5-6 6-49 6-50 7-8 8-46 8-47 10-11 10-14 11-12 12-53
12-54 18-19 18-20 19-21 20-24 21-22 22-51 22-52 35-36 36-48

ring/chain bonds :

1-42 1-43

exact/norm bonds :

1-2 1-33 1-42 1-43 6-49 6-50 7-8 8-46 8-47 10-11 12-53 12-54 22-51
22-52 35-36 36-48

exact bonds :

3-4 4-5 5-6 10-14 11-12 18-19 18-20 19-21 20-24 21-22

G1: [*1], [*2], [*3], [*4], [*5]

09/801,933

Thomas McKenzie

G2:[*6],[*7]

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:Atom 7:Atom 8:Atom 10:CLASS
11:CLASS 12:Atom 14:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:Atom
24:CLASS 33:CLASS 35:Atom 36:Atom 38:Atom 39:Atom 42:CLASS 43:CLASS
46:CLASS 47:CLASS 48:CLASS 49:CLASS 50:CLASS 51:CLASS 52:CLASS 53:CLASS
54:CLASS

Generic attributes :

6:

Saturation : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System : Monocyclic

7:

Saturation : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System : Monocyclic

8:

Saturation : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System : Monocyclic

12:

Saturation : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System : Monocyclic

22:

Saturation : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System : Monocyclic

35:

Saturation : Unsaturated
Number of Carbon Atoms : less than 7
Number of Hetero Atoms : less than 2
Type of Ring System : Monocyclic

36:

Saturation : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System : Monocyclic

Element Count :

Node 7: Limited

C,C3-5

O,O1

S,S1

N,N0-2

Node 35: Limited

O,O1

L2 STRUCTURE UPLOADED

=> s 11

SAMPLE SEARCH INITIATED 18:28:36 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 16567 TO ITERATE

09/801,933

Thomas McKenzie

6.0% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

14 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 323636 TO 339044
PROJECTED ANSWERS: 3725 TO 5551

L3 14 SEA SSS SAM L1

=> s 12

SAMPLE SEARCH INITIATED 18:28:43 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 34835 TO ITERATE

2.9% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: 685557 TO 707843
PROJECTED ANSWERS: 0 TO 0

L4 0 SEA SSS SAM L2

=> s 12 subset = 13 sample

SAMPLE SUBSET SEARCH INITIATED 18:29:06 FILE 'REGISTRY'
SAMPLE SUBSET SCREEN SEARCH COMPLETED - 14 TO ITERATE

100.0% PROCESSED 14 ITERATIONS
SEARCH TIME: 00.00.01

0 ANSWERS

PROJECTIONS (WITHIN SPECIFIED SUBSET): ONLINE **COMPLETE**
PROJECTED ITERATIONS (WITHIN SPECIFIED SUBSET): 56 TO 504
PROJECTED ANSWERS (WITHIN SPECIFIED SUBSET): 0 TO 0

L5 0 SEA SUB=L3 SSS SAM L2

=> s 11 full

FULL SEARCH INITIATED 18:29:19 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 330087 TO ITERATE

100.0% PROCESSED 330087 ITERATIONS
SEARCH TIME: 00.00.07

3470 ANSWERS

L6 3470 SEA SSS FUL L1

=> s 12 subset = 16 full

FULL SUBSET SEARCH INITIATED 18:29:44 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED - 3470 TO ITERATE

100.0% PROCESSED 3470 ITERATIONS
SEARCH TIME: 00.00.01

34 ANSWERS

L7 34 SEA SUB=L6 SSS FUL L2

=> file caplus caold; s 17

FILE 'CAPLUS' ENTERED AT 18:30:06 ON 25 AUG 2004
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L8 12 L7

=> file reg
FILE 'REGISTRY' ENTERED AT 18:30:31 ON 25 AUG 2004
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STRUCTURE FILE UPDATES: 24 AUG 2004 HIGHEST RN 732209-96-0
DICTIONARY FILE UPDATES: 24 AUG 2004 HIGHEST RN 732209-96-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

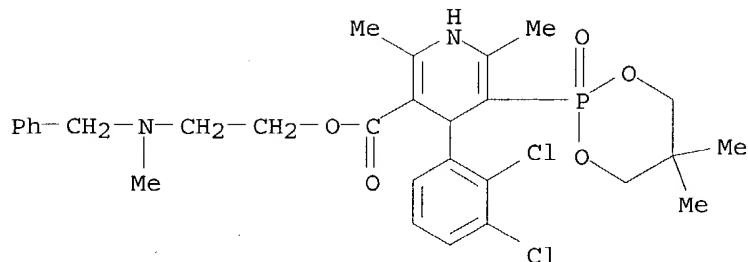
Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d l7 1-34 ide cbib pi

L7 ANSWER 1 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN
RN 146345-52-0 REGISTRY
CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-
1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-,
2-[methyl(phenylmethyl)amino]ethyl ester, hydrochloride (9CI) (CA INDEX
NAME)
OTHER CA INDEX NAMES:
CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.
CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-
dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-
[methyl(phenylmethyl)amino]ethyl ester, P-oxide, hydrochloride
MF C29 H35 Cl2 N2 O5 P . x Cl H
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAPLUS document type: Journal
RL.NP Roles from non-patents: RACT (Reactant or reagent)
CRN (102098-28-2)



●x HCl

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 118:124668 Synthesis of 1,4-dihydropyridine-5-phosphonates and their calcium-antagonistic and antihypertensive activities: novel calcium-antagonist 2-[benzyl(phenyl)amino]ethyl 5-(5,5-dimethyl-2-oxo-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-4-(3-nitrophenyl)-3-pyridinecarboxylate hydrochloride ethanol (NZ-105) and its crystal structure. Sakoda, Ryozi; Kamikawaji, Yoshimasa; Seto, Kiyotomo (Cent. Res. Inst., Nissan Chem. Ind. Co., Ltd., Funabashi, 274, Japan). Chemical & Pharmaceutical Bulletin, 40(9), 2362-9 (English) 1992. CODEN: CPBTAL. ISSN: 0009-2363.

L7 ANSWER 2 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 131356-83-7 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(1,3-diethyl-2-oxido-1,3,2-diazaphospholidin-2-yl)-2,6-dimethyl-, 2-[methyl(phenylmethyl)amino]ethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Diazaphospholidine, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(1,3-diethyl-1,3,2-diazaphospholidin-2-yl)-2,6-dimethyl-, 2-[methyl(phenylmethyl)amino]ethyl ester, P-oxide

FS 3D CONCORD

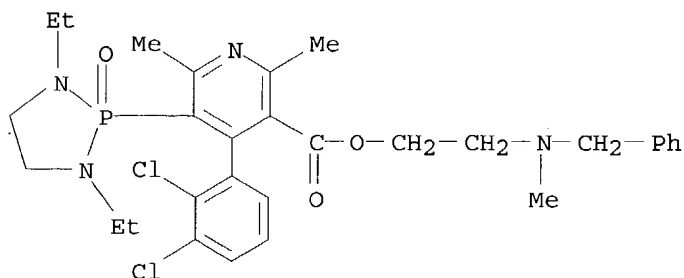
MF C30 H37 Cl2 N4 O3 P

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

DT.CA Caplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); USES (Uses)



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 114:30121 Drug effect-enhancing agent for antitumor drug.

Akiyama, Shinichi; Sakoda, Ryoza; Seto, Kiyotomo; Shudo, Norimasa (Nissan Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 353692 A2 19900207, 40 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1989-114113 19890731. PRIORITY: JP 1988-193002 19880802; JP 1989-168545 19890630.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| PI EP 353692 | A2 | 19900207 | EP 1989-114113 | 19890731 |
| EP 353692 | A3 | 19910508 | | |
| EP 353692 | B1 | 19951004 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| JP 02138221 | A2 | 19900528 | JP 1989-168549 | 19890630 |
| JP 2850376 | B2 | 19990127 | | |
| CA 1334752 | A1 | 19950314 | CA 1989-607026 | 19890731 |
| EP 655455 | A1 | 19950531 | EP 1995-101310 | 19890731 |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| AT 128623 | E | 19951015 | AT 1989-114113 | 19890731 |
| US 5130303 | A | 19920714 | US 1991-729904 | 19910715 |
| US 5304550 | A | 19940419 | US 1993-57902 | 19930507 |
| US 5508403 | A | 19960416 | US 1995-463511 | 19950605 |

L7 ANSWER 3 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 131332-80-4 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(4,6-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-(4-phenyl-1-piperidiny)ethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(4,6-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-(4-phenyl-1-piperidiny)ethyl ester, P-oxide

FS 3D CONCORD

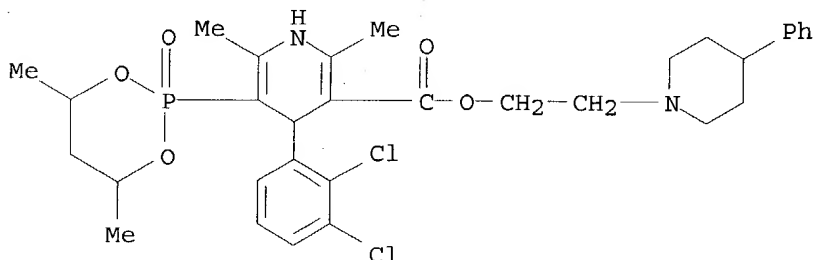
MF C32 H39 Cl2 N2 O5 P

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

DT.CA Caplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 114:30121 Drug effect-enhancing agent for antitumor drug.
 Akiyama, Shinichi; Sakoda, Ryozi; Seto, Kiyotomo; Shudo, Norimasa (Nissan Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 353692 A2 19900207, 40 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1989-114113 19890731. PRIORITY: JP 1988-193002 19880802; JP 1989-168545 19890630.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| PI EP 353692 | A2 | 19900207 | EP 1989-114113 | 19890731 |
| EP 353692 | A3 | 19910508 | | |
| EP 353692 | B1 | 19951004 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| JP 02138221 | A2 | 19900528 | JP 1989-168549 | 19890630 |
| JP 2850376 | B2 | 19990127 | | |
| CA 1334752 | A1 | 19950314 | CA 1989-607026 | 19890731 |
| EP 655455 | A1 | 19950531 | EP 1995-101310 | 19890731 |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| AT 128623 | E | 19951015 | AT 1989-114113 | 19890731 |
| US 5130303 | A | 19920714 | US 1991-729904 | 19910715 |
| US 5304550 | A | 19940419 | US 1993-57902 | 19930507 |
| US 5508403 | A | 19960416 | US 1995-463511 | 19950605 |

L7 ANSWER 4 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 126854-61-3 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-(4-phenylcyclohexylidene)ethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-(4-phenylcyclohexylidene)ethyl ester, P-oxide

FS 3D CONCORD

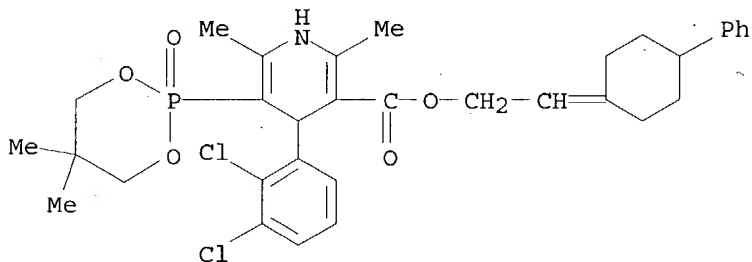
MF C33 H38 Cl2 N O5 P

SR CA

LC STN Files: CA, CAPLUS

DT.CA Caplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 112:198803 5-(Alkylenedioxyphosphinyl)-2,6-dimethyl-4-phenyl-1,4-dihydropyridine-3-carboxylic acid esters as antihypertensives. Seto, Kyotomo; Sakota, Ryoze; Tanaka, Sakuya (Nissan Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 01275591 A2 19891106 Heisei, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1988-105175 19880427.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|-----------------|----------|
| PI JP 01275591 | A2 | 19891106 | JP 1988-105175 | 19880427 |

L7 ANSWER 5 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 113955-09-2 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-1,4-dihydro-2,6-dimethyl-5-(tetrahydro-3,4,6-trimethyl-2-oxido-2H-1,3,2-oxazaphosphorin-2-yl)-, 2-[methyl(phenylmethyl)amino]ethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2H-1,3,2-Oxazaphosphorine, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-1,4-dihydro-2,6-dimethyl-5-(tetrahydro-3,4,6-trimethyl-2H-1,3,2-oxazaphosphorin-2-yl)-, 2-[methyl(phenylmethyl)amino]ethyl ester, P-oxide

FS 3D CONCORD

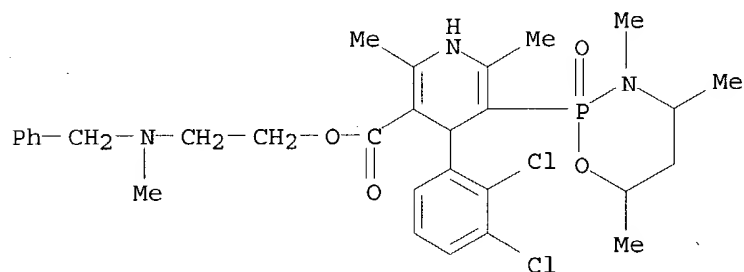
MF C30 H38 Cl2 N3 O4 P

SR CA

LC STN Files: CA, CAPLUS

DT.CA Caplus document type: Patent

RL.P Roles from patents: PREP (Preparation)



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 108:167687 Preparation of dihydropyridine-5-phosphonamidic acid derivatives for treatment of circulation disorders. Kamikawaji, Masumasa; Seto, Kyotomo; Sakota, Ryoze; Tanaka, Sakuya (Nissan Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 62195392 A2 19870828 Showa, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1986-36402 19860220.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|-----------------|----------|
| PI JP 62195392 | A2 | 19870828 | JP 1986-36402 | 19860220 |
| JP 06015553 | B4 | 19940302 | | |

L7 ANSWER 6 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 113955-06-9 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(3,5-dimethyl-2-oxido-1,3,2-oxazaphospholidin-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[methyl(phenylmethyl)amino]ethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

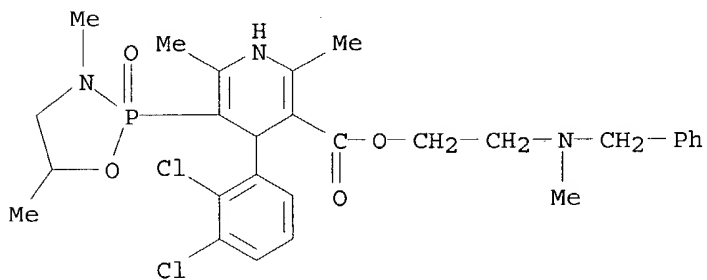
CN 1,3,2-Oxazaphospholidine, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(3,5-dimethyl-1,3,2-

09/801,933

Thomas McKenzie

oxazaphospholidin-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-
[methyl(phenylmethyl)amino]ethyl ester, P-oxide
FS 3D CONCORD
MF C28 H34 Cl2 N3 O4 P
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation)



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 108:167687 Preparation of dihydropyridine-5-phosphonamidic acid derivatives for treatment of circulation disorders. Kamikawaji, Masumasa; Seto, Kyotomo; Sakota, Ryozi; Tanaka, Sakuya (Nissan Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 62195392 A2 19870828 Showa, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1986-36402 19860220.

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 62195392 | A2 | 19870828 | JP 1986-36402 | 19860220 |
| | JP 06015553 | B4 | 19940302 | | |

L7 ANSWER 7 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 111524-12-0 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorin-2-yl)-1,4-dihydro-2,6-dimethyl-, decyl ester (9CI)
(CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorin-2-yl)-1,4-dihydro-2,6-dimethyl-, decyl ester, P-oxide

FS 3D CONCORD

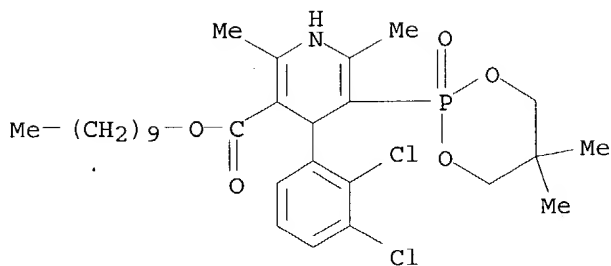
MF C29 H42 Cl2 N O5 P

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation)



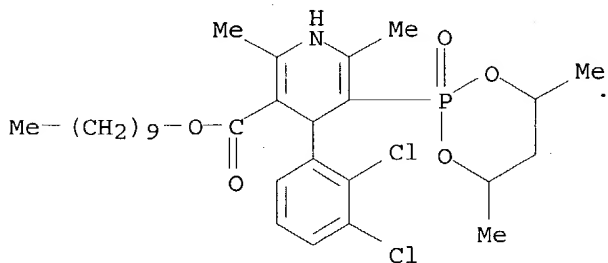
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237011 A process for the preparation of dihydropyridinephosphonates as therapeutics for circulatory disorders. Seto, Kyotomo; Sakota, Ryoza; Tanaka, Sakuya (Nissan Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 62169796 A2 19870725 Showa, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1986-12757 19860123.

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 62169796 | A2 | 19870725 | JP 1986-12757 | 19860123 |
| | JP 06078349 | B4 | 19941005 | | |

L7 ANSWER 8 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN
RN 111495-24-0 REGISTRY
CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(4,6-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, decyl ester (9CI)
(CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.
CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(4,6-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, decyl ester, P-oxide
FS 3D CONCORD
MF C29 H42 Cl2 N O5 P
SR CA
LC STN Files: CA, CAPLUS
DT.CA Caplus document type: Patent
RL.P Roles from patents: PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

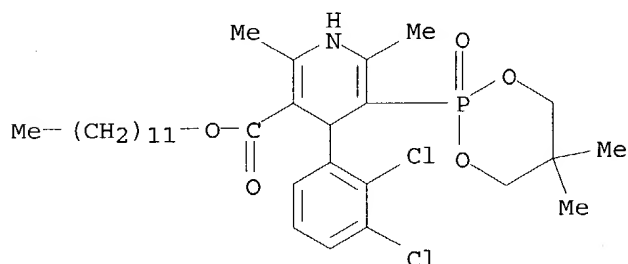
1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237011 A process for the preparation of dihydropyridinephosphonates as therapeutics for circulatory disorders. Seto, Kyotomo; Sakota, Ryozyo; Tanaka, Sakuya (Nissan Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 62169796 A2 19870725 Showa, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1986-12757 19860123.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| JP 62169796 | A2 | 19870725 | JP 1986-12757 | 19860123 |
| JP 06078349 | B4 | 19941005 | | |

L7 ANSWER 9 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 111495-11-5 REGISTRY
 CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, dodecyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:
 CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.
 CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, dodecyl ester, P-oxide
 FS 3D CONCORD
 MF C31 H46 Cl2 N O5 P
 SR CA
 LC STN Files: CA, CAPLUS
 DT.CA Caplus document type: Patent
 RL.P Roles from patents: PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

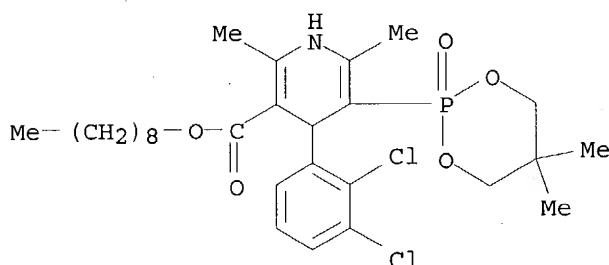
1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237011 A process for the preparation of dihydropyridinephosphonates as therapeutics for circulatory disorders. Seto, Kyotomo; Sakota, Ryozyo; Tanaka, Sakuya (Nissan Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 62169796 A2 19870725 Showa, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1986-12757 19860123.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| JP 62169796 | A2 | 19870725 | JP 1986-12757 | 19860123 |
| JP 06078349 | B4 | 19941005 | | |

L7 ANSWER 10 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 111495-03-5 REGISTRY
 CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, nonyl ester (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.
 CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, nonyl ester, P-oxide
 FS 3D CONCORD
 MF C28 H40 Cl2 N O5 P
 SR CA
 LC STN Files: CA, CAPLUS
 DT.CA CAplus document type: Patent
 RL.P Roles from patents: PREP (Preparation)



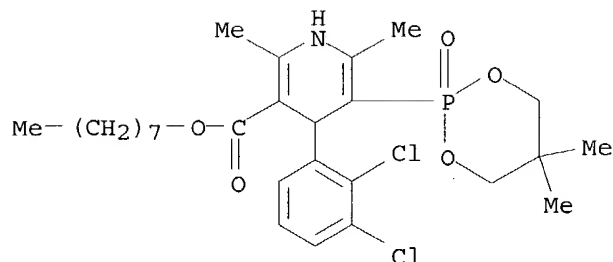
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237011 A process for the preparation of dihydropyridinephosphonates as therapeutics for circulatory disorders. Seto, Kyotomo; Sakota, Ryoza; Tanaka, Sakuya (Nissan Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 62169796 A2 19870725 Showa, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1986-12757 19860123.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| JP 62169796 | A2 | 19870725 | JP 1986-12757 | 19860123 |
| JP 06078349 | B4 | 19941005 | | |

L7 ANSWER 11 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 111495-02-4 REGISTRY
 CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, octyl ester (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.
 CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, octyl ester, P-oxide
 FS 3D CONCORD
 MF C27 H38 Cl2 N O5 P
 SR CA
 LC STN Files: CA, CAPLUS
 DT.CA CAplus document type: Patent
 RL.P Roles from patents: PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237011 A process for the preparation of dihydropyridinephosphonates as therapeutics for circulatory disorders. Seto, Kyotomo; Sakota, Ryoza; Tanaka, Sakuya (Nissan Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 62169796 A2 19870725 Showa, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1986-12757 19860123.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|-----------------|----------|
| PI JP 62169796 | A2 | 19870725 | JP 1986-12757 | 19860123 |
| JP 06078349 | B4 | 19941005 | | |

L7 ANSWER 12 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 111011-73-5 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 1-methyl-2-[phenyl(phenylmethyl)amino]ethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 1-methyl-2-[phenyl(phenylmethyl)amino]ethyl ester, P-oxide

FS 3D CONCORD

MF C35 H39 Cl2 N2 O5 P

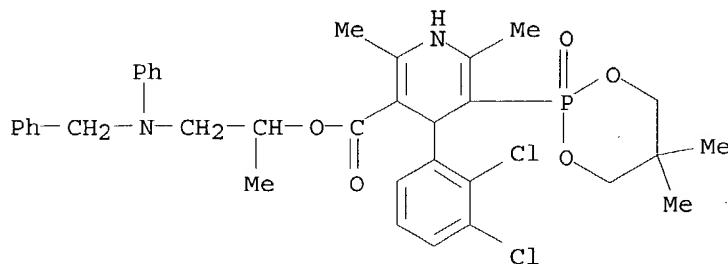
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SR CA

LC STN Files: CA, CAPLUS

DT.CA Caplus document type: Patent

RL.P Roles from patents: PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237009 Preparation of dihydropyridine-5-phosphonic acid cyclic propylene esters as antihypertensives and vasodilators. Seto, Kiyotomo; Tanaka, Sakuya; Sakoda, Ryoza; Sakai, Tosinori; Masuda, Yukinori (Nissan Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 230944 A1 19870805, 28 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1987-100602 19870119. PRIORITY: JP 1986-11255 19860122; JP 1986-12755 19860123; US 1986-851158 19860414; JP 1986-280159 19861125.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 230944 | A1 | 19870805 | EP 1987-100602 | 19870119 |
| EP 230944 | B1 | 19900207 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| JP 62169795 | A2 | 19870725 | JP 1986-11255 | 19860122 |
| JP 06055751 | B4 | 19940727 | | |
| US 4885284 | A | 19891205 | US 1986-851158 | 19860414 |
| CA 1304379 | A1 | 19920630 | CA 1986-507085 | 19860418 |
| CN 87100286 | A | 19880113 | CN 1987-100286 | 19870114 |
| CN 1016063 | B | 19920401 | | |
| AU 8767635 | A1 | 19870723 | AU 1987-67635 | 19870116 |
| AU 589485 | B2 | 19891012 | | |
| AT 50263 | E | 19900215 | AT 1987-100602 | 19870119 |
| WO 8704439 | A1 | 19870730 | WO 1987-JP32 | 19870120 |
| W: BG, BR, DK, FI, HU, KR, NO, RO, SU | | | | |
| ZA 8700403 | A | 19870930 | ZA 1987-403 | 19870120 |
| HU 44570 | A2 | 19880328 | HU 1987-768 | 19870120 |
| HU 196605 | B | 19881228 | | |
| JP 63233992 | A2 | 19880929 | JP 1987-10230 | 19870120 |
| JP 06099458 | B4 | 19941207 | | |
| IL 81315 | A1 | 19911121 | IL 1987-81315 | 19870120 |
| DD 276873 | A5 | 19900314 | DD 1987-299387 | 19870121 |
| FI 8703503 | A | 19870812 | FI 1987-3503 | 19870812 |
| FI 85491 | B | 19920115 | | |
| FI 85491 | C | 19920427 | | |
| SU 1586519 | A3 | 19900815 | SU 1987-4203193 | 19870814 |
| DK 8704280 | A | 19870817 | DK 1987-4280 | 19870817 |
| DK 168821 | B1 | 19940620 | | |
| NO 8703453 | A | 19870817 | NO 1987-3453 | 19870817 |
| NO 170728 | B | 19920817 | | |
| NO 170728 | C | 19921125 | | |

L7 ANSWER 13 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 111011-72-4 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]ethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]ethyl ester, P-oxide

FS 3D CONCORD

MF C38 H42 Cl2 F2 N3 O5 P

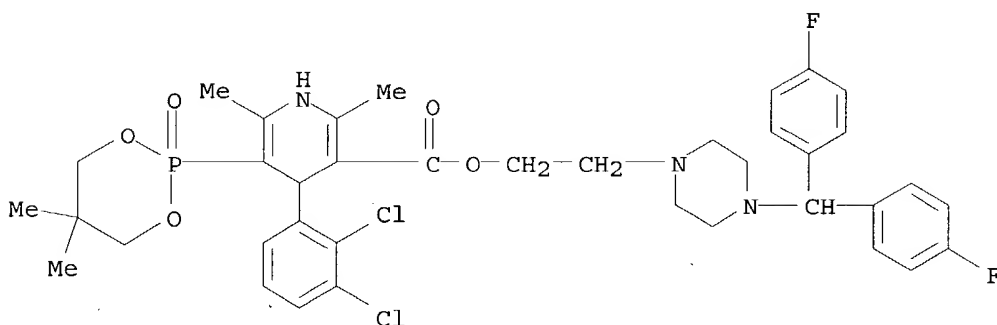
CI COM

SR CA

LC STN Files: CA, CAPLUS

DT.CA Caplus document type: Patent

RL.P Roles from patents: PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237009 Preparation of dihydropyridine-5-phosphonic acid cyclic propylene esters as antihypertensives and vasodilators. Seto, Kiyotomo; Tanaka, Sakuya; Sakoda, Ryoza; Sakai, Tosinori; Masuda, Yukinori (Nissan Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 230944 A1 19870805, 28 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1987-100602 19870119. PRIORITY: JP 1986-11255 19860122; JP 1986-12755 19860123; US 1986-851158 19860414; JP 1986-280159 19861125.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 230944 | A1 | 19870805 | EP 1987-100602 | 19870119 |
| EP 230944 | B1 | 19900207 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| JP 62169795 | A2 | 19870725 | JP 1986-11255 | 19860122 |
| JP 06055751 | B4 | 19940727 | | |
| US 4885284 | A | 19891205 | US 1986-851158 | 19860414 |
| CA 1304379 | A1 | 19920630 | CA 1986-507085 | 19860418 |
| CN 87100286 | A | 19880113 | CN 1987-100286 | 19870114 |
| CN 1016063 | B | 19920401 | | |
| AU 8767635 | A1 | 19870723 | AU 1987-67635 | 19870116 |
| AU 589485 | B2 | 19891012 | | |
| AT 50263 | E | 19900215 | AT 1987-100602 | 19870119 |
| WO 8704439 | A1 | 19870730 | WO 1987-JP32 | 19870120 |
| W: BG, BR, DK, FI, HU, KR, NO, RO, SU | | | | |
| ZA 8700403 | A | 19870930 | ZA 1987-403 | 19870120 |
| HU 44570 | A2 | 19880328 | HU 1987-768 | 19870120 |
| HU 196605 | B | 19881228 | | |
| JP 63233992 | A2 | 19880929 | JP 1987-10230 | 19870120 |
| JP 06099458 | B4 | 19941207 | | |
| IL 81315 | A1 | 19911121 | IL 1987-81315 | 19870120 |
| DD 276873 | A5 | 19900314 | DD 1987-299387 | 19870121 |

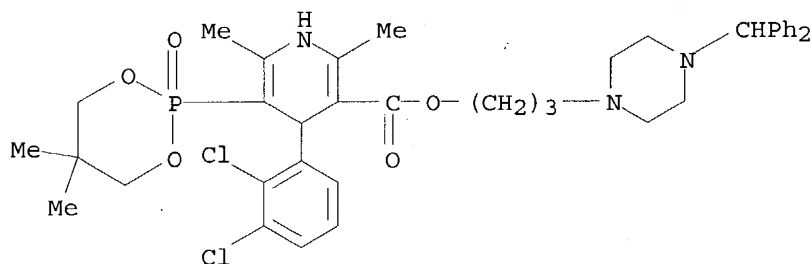
Thomas McKenzie

| | | | | |
|------------|----|----------|-----------------|----------|
| FI 8703503 | A | 19870812 | FI 1987-3503 | 19870812 |
| FI 85491 | B | 19920115 | | |
| FI 85491 | C | 19920427 | | |
| SU 1586519 | A3 | 19900815 | SU 1987-4203193 | 19870814 |
| DK 8704280 | A | 19870817 | DK 1987-4280 | 19870817 |
| DK 168821 | B1 | 19940620 | | |
| NO 8703453 | A | 19870817 | NO 1987-3453 | 19870817 |
| NO 170728 | B | 19920817 | | |
| NO 170728 | C | 19921125 | | |

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L7  ANSWER 14 OF 34  REGISTRY  COPYRIGHT 2004 ACS on STN
RN  111011-71-3  REGISTRY
CN  3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-
    1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-,
    3-[4-(diphenylmethyl)-1-piperazinyl]propyl ester (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN  1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.
CN  3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-
    dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 3-[4-(diphenylmethyl)-1-
    piperazinyl]propyl ester, P-oxide
FS  3D CONCORD
MF  C39 H46 Cl2 N3 O5 P
CI  COM
SR  CA
LC  STN Files:  CA, CAPLUS, CASREACT
DT.CA  Caplus document type:  Patent
RL.P  Roles from patents:  PREP (Preparation)

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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237009 Preparation of dihydropyridine-5-phosphonic acid cyclic propylene esters as antihypertensives and vasodilators. Seto, Kiyotomo; Tanaka, Sakuya; Sakoda, Ryoza; Sakai, Tosinori; Masuda, Yukinori (Nissan Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 230944 A1 19870805, 28 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1987-100602 19870119. PRIORITY: JP 1986-11255 19860122; JP 1986-12755 19860123; US 1986-851158 19860414; JP 1986-280159 19861125.

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| PI | EP 230944 | A1 | 19870805 | EP 1987-100602 | 19870119 |
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| | R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |

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| JP 62169795 | A2 | 19870725 | JP 1986-11255 | 19860122 |
| JP 06055751 | B4 | 19940727 | | |
| US 4885284 | A | 19891205 | US 1986-851158 | 19860414 |
| CA 1304379 | A1 | 19920630 | CA 1986-507085 | 19860418 |
| CN 87100286 | A | 19880113 | CN 1987-100286 | 19870114 |
| CN 1016063 | B | 19920401 | | |
| AU 8767635 | A1 | 19870723 | AU 1987-67635 | 19870116 |
| AU 589485 | B2 | 19891012 | | |
| AT 50263 | E | 19900215 | AT 1987-100602 | 19870119 |
| WO 8704439 | A1 | 19870730 | WO 1987-JP32 | 19870120 |
| W: BG, BR, DK, FI, HU, KR, NO, RO, SU | | | | |
| ZA 8700403 | A | 19870930 | ZA 1987-403 | 19870120 |
| HU 44570 | A2 | 19880328 | HU 1987-768 | 19870120 |
| HU 196605 | B | 19881228 | | |
| JP 63233992 | A2 | 19880929 | JP 1987-10230 | 19870120 |
| JP 06099458 | B4 | 19941207 | | |
| IL 81315 | A1 | 19911121 | IL 1987-81315 | 19870120 |
| DD 276873 | A5 | 19900314 | DD 1987-299387 | 19870121 |
| FI 8703503 | A | 19870812 | FI 1987-3503 | 19870812 |
| FI 85491 | B | 19920115 | | |
| FI 85491 | C | 19920427 | | |
| SU 1586519 | A3 | 19900815 | SU 1987-4203193 | 19870814 |
| DK 8704280 | A | 19870817 | DK 1987-4280 | 19870817 |
| DK 168821 | B1 | 19940620 | | |
| NO 8703453 | A | 19870817 | NO 1987-3453 | 19870817 |
| NO 170728 | B | 19920817 | | |
| NO 170728 | C | 19921125 | | |

L7 ANSWER 15 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 111011-70-2 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-(diphenylamino)ethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-(diphenylamino)ethyl ester, P-oxide

FS 3D CONCORD

MF C33 H35 Cl2 N2 O5 P

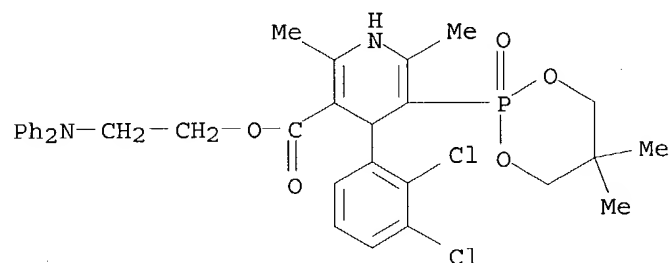
CI COM

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAPLUS document type: Patent

RL.P Roles from patents: PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237009 Preparation of dihydropyridine-5-phosphonic acid cyclic propylene esters as antihypertensives and vasodilators. Seto, Kiyotomo; Tanaka, Sakuya; Sakoda, Ryoza; Sakai, Tosinori; Masuda, Yukinori (Nissan Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 230944 A1 19870805, 28 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1987-100602 19870119. PRIORITY: JP 1986-11255 19860122; JP 1986-12755 19860123; US 1986-851158 19860414; JP 1986-280159 19861125.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 230944 | A1 | 19870805 | EP 1987-100602 | 19870119 |
| EP 230944 | B1 | 19900207 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| JP 62169795 | A2 | 19870725 | JP 1986-11255 | 19860122 |
| JP 06055751 | B4 | 19940727 | | |
| US 4885284 | A | 19891205 | US 1986-851158 | 19860414 |
| CA 1304379 | A1 | 19920630 | CA 1986-507085 | 19860418 |
| CN 87100286 | A | 19880113 | CN 1987-100286 | 19870114 |
| CN 1016063 | B | 19920401 | | |
| AU 8767635 | A1 | 19870723 | AU 1987-67635 | 19870116 |
| AU 589485 | B2 | 19891012 | | |
| AT 50263 | E | 19900215 | AT 1987-100602 | 19870119 |
| WO 8704439 | A1 | 19870730 | WO 1987-JP32 | 19870120 |
| W: BG, BR, DK, FI, HU, KR, NO, RO, SU | | | | |
| ZA 8700403 | A | 19870930 | ZA 1987-403 | 19870120 |
| HU 44570 | A2 | 19880328 | HU 1987-768 | 19870120 |
| HU 196605 | B | 19881228 | | |
| JP 63233992 | A2 | 19880929 | JP 1987-10230 | 19870120 |
| JP 06099458 | B4 | 19941207 | | |
| IL 81315 | A1 | 19911121 | IL 1987-81315 | 19870120 |
| DD 276873 | A5 | 19900314 | DD 1987-299387 | 19870121 |
| FI 8703503 | A | 19870812 | FI 1987-3503 | 19870812 |
| FI 85491 | B | 19920115 | | |
| FI 85491 | C | 19920427 | | |
| SU 1586519 | A3 | 19900815 | SU 1987-4203193 | 19870814 |
| DK 8704280 | A | 19870817 | DK 1987-4280 | 19870817 |
| DK 168821 | B1 | 19940620 | | |
| NO 8703453 | A | 19870817 | NO 1987-3453 | 19870817 |
| NO 170728 | B | 19920817 | | |
| NO 170728 | C | 19921125 | | |

L7 ANSWER 16 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 111011-68-8 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(4,6-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 1-methyl-2-[phenyl(phenylmethyl)amino]ethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(4,6-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 1-methyl-2-[phenyl(phenylmethyl)amino]ethyl ester, P-oxide

FS 3D CONCORD

MF C35 H39 Cl2 N2 O5 P

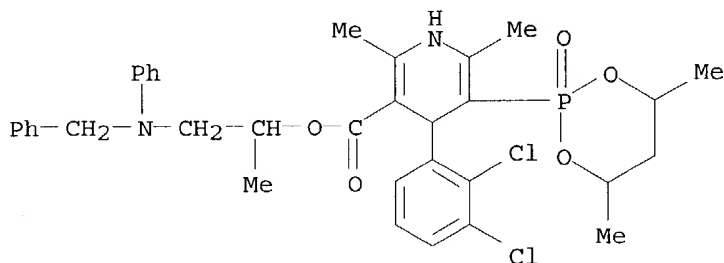
CI COM

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAPLUS document type: Patent

RL.P Roles from patents: PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237009 Preparation of dihydropyridine-5-phosphonic acid cyclic propylene esters as antihypertensives and vasodilators. Seto, Kiyotomo; Tanaka, Sakuya; Sakoda, Ryoza; Sakai, Tosinori; Masuda, Yukinori (Nissan Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 230944 A1 19870805, 28 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1987-100602 19870119. PRIORITY: JP 1986-11255 19860122; JP 1986-12755 19860123; US 1986-851158 19860414; JP 1986-280159 19861125.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| EP 230944 | A1 | 19870805 | EP 1987-100602 | 19870119 |
| EP 230944 | B1 | 19900207 | | |

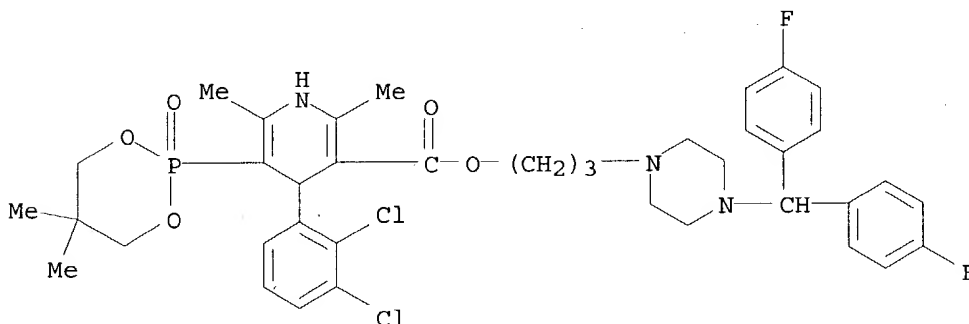
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| JP 62169795 | A2 | 19870725 | JP 1986-11255 | 19860122 |
| JP 06055751 | B4 | 19940727 | | |
| US 4885284 | A | 19891205 | US 1986-851158 | 19860414 |
| CA 1304379 | A1 | 19920630 | CA 1986-507085 | 19860418 |
| CN 87100286 | A | 19880113 | CN 1987-100286 | 19870114 |
| CN 1016063 | B | 19920401 | | |
| AU 8767635 | A1 | 19870723 | AU 1987-67635 | 19870116 |
| AU 589485 | B2 | 19891012 | | |
| AT 50263 | E | 19900215 | AT 1987-100602 | 19870119 |
| WO 8704439 | A1 | 19870730 | WO 1987-JP32 | 19870120 |
| ZA 8700403 | A | 19870930 | ZA 1987-403 | 19870120 |
| HU 44570 | A2 | 19880328 | HU 1987-768 | 19870120 |
| HU 196605 | B | 19881228 | | |
| JP 63233992 | A2 | 19880929 | JP 1987-10230 | 19870120 |
| JP 06099458 | B4 | 19941207 | | |
| IL 81315 | A1 | 19911121 | IL 1987-81315 | 19870120 |
| DD 276873 | A5 | 19900314 | DD 1987-299387 | 19870121 |
| FI 8703503 | A | 19870812 | FI 1987-3503 | 19870812 |
| FI 85491 | B | 19920115 | | |
| FI 85491 | C | 19920427 | | |
| SU 1586519 | A3 | 19900815 | SU 1987-4203193 | 19870814 |
| DK 8704280 | A | 19870817 | DK 1987-4280 | 19870817 |
| DK 168821 | B1 | 19940620 | | |

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| NO 8703453 | A | 19870817 | NO 1987-3453 | 19870817 |
| NO 170728 | B | 19920817 | | |
| NO 170728 | C | 19921125 | | |

L7 ANSWER 17 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 111011-65-5 REGISTRY
 CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-,
 3-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]propyl ester (9CI) (CA
 INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.
 CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 3-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]propyl ester, P-oxide
 FS 3D CONCORD
 MF C39 H44 Cl2 F2 N3 O5 P
 CI COM
 SR CA
 LC STN Files: CA, CAPLUS
 DT.CA Caplus document type: Patent
 RL.P Roles from patents: PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237009 Preparation of dihydropyridine-5-phosphonic acid cyclic propylene esters as antihypertensives and vasodilators. Seto, Kiyotomo; Tanaka, Sakuya; Sakoda, Ryozyo; Sakai, Tosinori; Masuda, Yukinori (Nissan Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 230944 A1 19870805, 28 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1987-100602 19870119. PRIORITY: JP 1986-11255 19860122; JP 1986-12755 19860123; US 1986-851158 19860414; JP 1986-280159 19861125.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 230944 | A1 | 19870805 | EP 1987-100602 | 19870119 |
| EP 230944 | B1 | 19900207 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| JP 62169795 | A2 | 19870725 | JP 1986-11255 | 19860122 |

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| JP 06055751 | B4 | 19940727 | | |
| US 4885284 | A | 19891205 | US 1986-851158 | 19860414 |
| CA 1304379 | A1 | 19920630 | CA 1986-507085 | 19860418 |
| CN 87100286 | A | 19880113 | CN 1987-100286 | 19870114 |
| CN 1016063 | B | 19920401 | | |
| AU 8767635 | A1 | 19870723 | AU 1987-67635 | 19870116 |
| AU 589485 | B2 | 19891012 | | |
| AT 50263 | E | 19900215 | AT 1987-100602 | 19870119 |
| WO 8704439 | A1 | 19870730 | WO 1987-JP32 | 19870120 |
| W: BG, BR, DK, FI, HU, KR, NO, RO, SU | | | | |
| ZA 8700403 | A | 19870930 | ZA 1987-403 | 19870120 |
| HU 44570 | A2 | 19880328 | HU 1987-768 | 19870120 |
| HU 196605 | B | 19881228 | | |
| JP 63233992 | A2 | 19880929 | JP 1987-10230 | 19870120 |
| JP 06099458 | B4 | 19941207 | | |
| IL 81315 | A1 | 19911121 | IL 1987-81315 | 19870120 |
| DD 276873 | A5 | 19900314 | DD 1987-299387 | 19870121 |
| FI 8703503 | A | 19870812 | FI 1987-3503 | 19870812 |
| FI 85491 | B | 19920115 | | |
| FI 85491 | C | 19920427 | | |
| SU 1586519 | A3 | 19900815 | SU 1987-4203193 | 19870814 |
| DK 8704280 | A | 19870817 | DK 1987-4280 | 19870817 |
| DK 168821 | B1 | 19940620 | | |
| NO 8703453 | A | 19870817 | NO 1987-3453 | 19870817 |
| NO 170728 | B | 19920817 | | |
| NO 170728 | C | 19921125 | | |

L7 ANSWER 18 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 111011-64-4 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[4-(diphenylmethyl)-1-piperazinyl]ethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[4-(diphenylmethyl)-1-piperazinyl]ethyl ester, P-oxide

FS 3D CONCORD

MF C38 H44 Cl2 N3 O5 P

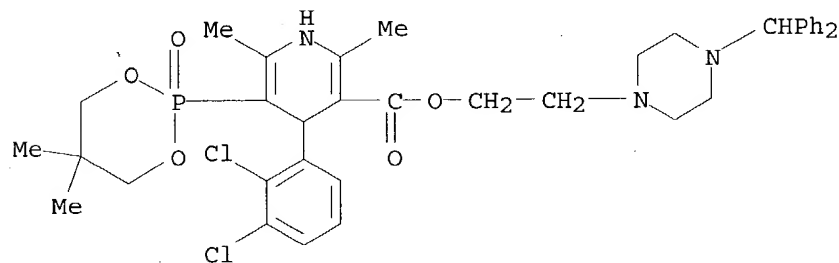
CI COM

SR CA

LC STN Files: CA, CAPLUS, CASREACT

DT.CA Caplus document type: Patent

RL.P Roles from patents: PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

'1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237009 Preparation of dihydropyridine-5-phosphonic acid cyclic propylene esters as antihypertensives and vasodilators. Seto, Kiyotomo; Tanaka, Sakuya; Sakoda, Ryoza; Sakai, Tosinori; Masuda, Yukinori (Nissan Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 230944 A1 19870805, 28 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1987-100602 19870119. PRIORITY: JP 1986-11255 19860122; JP 1986-12755 19860123; US 1986-851158 19860414; JP 1986-280159 19861125.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| PI EP 230944 | A1 | 19870805 | EP 1987-100602 | 19870119 |
| EP 230944 | B1 | 19900207 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| JP 62169795 | A2 | 19870725 | JP 1986-11255 | 19860122 |
| JP 06055751 | B4 | 19940727 | | |
| US 4885284 | A | 19891205 | US 1986-851158 | 19860414 |
| CA 1304379 | A1 | 19920630 | CA 1986-507085 | 19860418 |
| CN 87100286 | A | 19880113 | CN 1987-100286 | 19870114 |
| CN 1016063 | B | 19920401 | | |
| AU 8767635 | A1 | 19870723 | AU 1987-67635 | 19870116 |
| AU 589485 | B2 | 19891012 | | |
| AT 50263 | E | 19900215 | AT 1987-100602 | 19870119 |
| WO 8704439 | A1 | 19870730 | WO 1987-JP32 | 19870120 |
| W: BG, BR, DK, FI, HU, KR, NO, RO, SU | | | | |
| ZA 8700403 | A | 19870930 | ZA 1987-403 | 19870120 |
| HU 44570 | A2 | 19880328 | HU 1987-768 | 19870120 |
| HU 196605 | B | 19881228 | | |
| JP 63233992 | A2 | 19880929 | JP 1987-10230 | 19870120 |
| JP 06099458 | B4 | 19941207 | | |
| IL 81315 | A1 | 19911121 | IL 1987-81315 | 19870120 |
| DD 276873 | A5 | 19900314 | DD 1987-299387 | 19870121 |
| FI 8703503 | A | 19870812 | FI 1987-3503 | 19870812 |
| FI 85491 | B | 19920115 | | |
| FI 85491 | C | 19920427 | | |
| SU 1586519 | A3 | 19900815 | SU 1987-4203193 | 19870814 |
| DK 8704280 | A | 19870817 | DK 1987-4280 | 19870817 |
| DK 168821 | B1 | 19940620 | | |
| NO 8703453 | A | 19870817 | NO 1987-3453 | 19870817 |
| NO 170728 | B | 19920817 | | |
| NO 170728 | C | 19921125 | | |

L7 ANSWER 19 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 111011-62-2 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 1-methyl-2-[phenyl(phenylmethyl)amino]ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 1-methyl-2-[phenyl(phenylmethyl)amino]ethyl ester, P-oxide, monohydrochloride

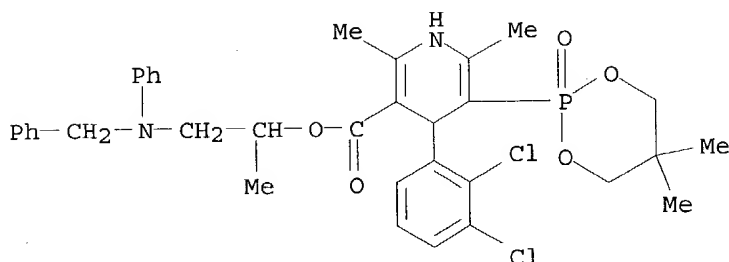
MF C35 H39 Cl2 N2 O5 P . Cl H

SR CA

LC STN Files: CA, CAPLUS

DT.CA Caplus document type: Patent

RL.P Roles from patents: PREP (Preparation)
 CRN (111011-73-5)



● HCl

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237009 Preparation of dihydropyridine-5-phosphonic acid cyclic propylene esters as antihypertensives and vasodilators. Seto, Kiyotomo; Tanaka, Sakuya; Sakoda, Ryojo; Sakai, Tosinori; Masuda, Yukinori (Nissan Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 230944 A1 19870805, 28 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1987-100602 19870119. PRIORITY: JP 1986-11255 19860122; JP 1986-12755 19860123; US 1986-851158 19860414; JP 1986-280159 19861125.

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|-------|----------|-----------------|----------|
| | ----- | ----- | ----- | ----- | ----- |
| PI | EP 230944 | A1 | 19870805 | EP 1987-100602 | 19870119 |
| | EP 230944 | B1 | 19900207 | | |
| | R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| | JP 62169795 | A2 | 19870725 | JP 1986-11255 | 19860122 |
| | JP 06055751 | B4 | 19940727 | | |
| | US 4885284 | A | 19891205 | US 1986-851158 | 19860414 |
| | CA 1304379 | A1 | 19920630 | CA 1986-507085 | 19860418 |
| | CN 87100286 | A | 19880113 | CN 1987-100286 | 19870114 |
| | CN 1016063 | B | 19920401 | | |
| | AU 8767635 | A1 | 19870723 | AU 1987-67635 | 19870116 |
| | AU 589485 | B2 | 19891012 | | |
| | AT 50263 | E | 19900215 | AT 1987-100602 | 19870119 |
| | WO 8704439 | A1 | 19870730 | WO 1987-JP32 | 19870120 |
| | W: BG, BR, DK, FI, HU, KR, NO, RO, SU | | | | |
| | ZA 8700403 | A | 19870930 | ZA 1987-403 | 19870120 |
| | HU 44570 | A2 | 19880328 | HU 1987-768 | 19870120 |
| | HU 196605 | B | 19881228 | | |
| | JP 63233992 | A2 | 19880929 | JP 1987-10230 | 19870120 |
| | JP 06099458 | B4 | 19941207 | | |
| | IL 81315 | A1 | 19911121 | IL 1987-81315 | 19870120 |
| | DD 276873 | A5 | 19900314 | DD 1987-299387 | 19870121 |
| | FI 8703503 | A | 19870812 | FI 1987-3503 | 19870812 |
| | FI 85491 | B | 19920115 | | |
| | FI 85491 | C | 19920427 | | |
| | SU 1586519 | A3 | 19900815 | SU 1987-4203193 | 19870814 |

| | | | | |
|------------|----|----------|--------------|----------|
| DK 8704280 | A | 19870817 | DK 1987-4280 | 19870817 |
| DK 168821 | B1 | 19940620 | | |
| NO 8703453 | A | 19870817 | NO 1987-3453 | 19870817 |
| NO 170728 | B | 19920817 | | |
| NO 170728 | C | 19921125 | | |

L7 ANSWER 20 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 111011-61-1 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]ethyl ester, dihydrochloride (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]ethyl ester, P-oxide, dihydrochloride

MF C38 H42 Cl2 F2 N3 O5 P . 2 Cl H

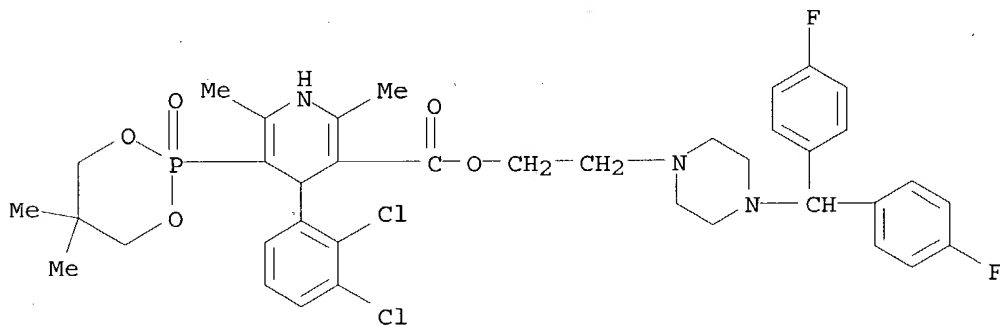
SR CA

LC STN Files: CA, CAPLUS

DT.CA Caplus document type: Patent

RL.P Roles from patents: PREP (Preparation)

CRN (111011-72-4)



●2 HCl

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237009 Preparation of dihydropyridine-5-phosphonic acid cyclic propylene esters as antihypertensives and vasodilators. Seto, Kiyotomo; Tanaka, Sakuya; Sakoda, Ryoza; Sakai, Tosinori; Masuda, Yukinori (Nissan Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 230944 A1 19870805, 28 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1987-100602 19870119. PRIORITY: JP 1986-11255 19860122; JP 1986-12755 19860123; US 1986-851158 19860414; JP 1986-280159 19861125.

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|----------|
| PI | EP 230944 | A1 | 19870805 | EP 1987-100602 | 19870119 |
| | EP 230944 | B1 | 19900207 | | |

R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE

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|---------------------------------------|----|----------|-----------------|----------|
| JP 62169795 | A2 | 19870725 | JP 1986-11255 | 19860122 |
| JP 06055751 | B4 | 19940727 | | |
| US 4885284 | A | 19891205 | US 1986-851158 | 19860414 |
| CA 1304379 | A1 | 19920630 | CA 1986-507085 | 19860418 |
| CN 87100286 | A | 19880113 | CN 1987-100286 | 19870114 |
| CN 1016063 | B | 19920401 | | |
| AU 8767635 | A1 | 19870723 | AU 1987-67635 | 19870116 |
| AU 589485 | B2 | 19891012 | | |
| AT 50263 | E | 19900215 | AT 1987-100602 | 19870119 |
| WO 8704439 | A1 | 19870730 | WO 1987-JP32 | 19870120 |
| W: BG, BR, DK, FI, HU, KR, NO, RO, SU | | | | |
| ZA 8700403 | A | 19870930 | ZA 1987-403 | 19870120 |
| HU 44570 | A2 | 19880328 | HU 1987-768 | 19870120 |
| HU 196605 | B | 19881228 | | |
| JP 63233992 | A2 | 19880929 | JP 1987-10230 | 19870120 |
| JP 06099458 | B4 | 19941207 | | |
| IL 81315 | A1 | 19911121 | IL 1987-81315 | 19870120 |
| DD 276873 | A5 | 19900314 | DD 1987-299387 | 19870121 |
| FI 8703503 | A | 19870812 | FI 1987-3503 | 19870812 |
| FI 85491 | B | 19920115 | | |
| FI 85491 | C | 19920427 | | |
| SU 1586519 | A3 | 19900815 | SU 1987-4203193 | 19870814 |
| DK 8704280 | A | 19870817 | DK 1987-4280 | 19870817 |
| DK 168821 | B1 | 19940620 | | |
| NO 8703453 | A | 19870817 | NO 1987-3453 | 19870817 |
| NO 170728 | B | 19920817 | | |
| NO 170728 | C | 19921125 | | |

L7 ANSWER 21 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 111011-60-0 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-,
3-[4-(diphenylmethyl)-1-piperazinyl]propyl ester, dihydrochloride (9CI)
(CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 3-[4-(diphenylmethyl)-1-piperazinyl]propyl ester, P-oxide, dihydrochloride

MF C39 H46 Cl2 N3 O5 P . 2 Cl H

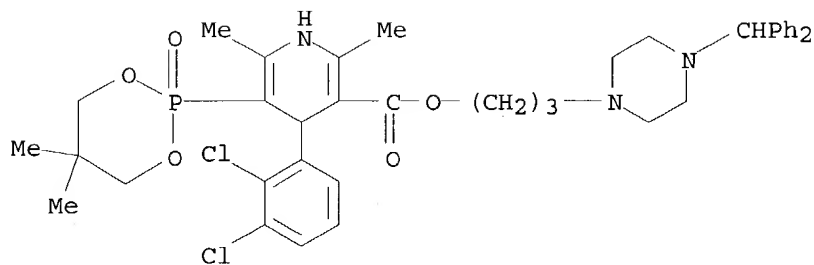
SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation)

CRN (111011-71-3)



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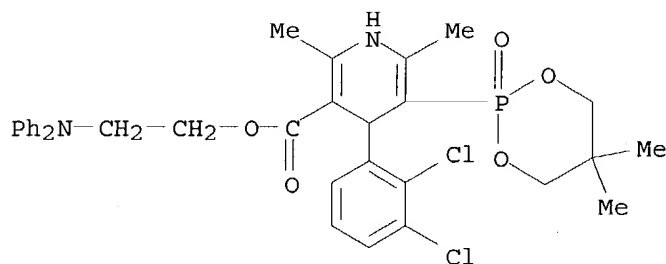
1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237009 Preparation of dihydropyridine-5-phosphonic acid cyclic propylene esters as antihypertensives and vasodilators. Seto, Kiyotomo; Tanaka, Sakuya; Sakoda, Ryoza; Sakai, Tosinori; Masuda, Yukinori (Nissan Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 230944 A1 19870805, 28 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1987-100602 19870119. PRIORITY: JP 1986-11255 19860122; JP 1986-12755 19860123; US 1986-851158 19860414; JP 1986-280159 19861125.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| PI EP 230944 | A1 | 19870805 | EP 1987-100602 | 19870119 |
| EP 230944 | B1 | 19900207 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| JP 62169795 | A2 | 19870725 | JP 1986-11255 | 19860122 |
| JP 06055751 | B4 | 19940727 | | |
| US 4885284 | A | 19891205 | US 1986-851158 | 19860414 |
| CA 1304379 | A1 | 19920630 | CA 1986-507085 | 19860418 |
| CN 87100286 | A | 19880113 | CN 1987-100286 | 19870114 |
| CN 1016063 | B | 19920401 | | |
| AU 8767635 | A1 | 19870723 | AU 1987-67635 | 19870116 |
| AU 589485 | B2 | 19891012 | | |
| AT 50263 | E | 19900215 | AT 1987-100602 | 19870119 |
| WO 8704439 | A1 | 19870730 | WO 1987-JP32 | 19870120 |
| W: BG, BR, DK, FI, HU, KR, NO, RO, SU | | | | |
| ZA 8700403 | A | 19870930 | ZA 1987-403 | 19870120 |
| HU 44570 | A2 | 19880328 | HU 1987-768 | 19870120 |
| HU 196605 | B | 19881228 | | |
| JP 63233992 | A2 | 19880929 | JP 1987-10230 | 19870120 |
| JP 06099458 | B4 | 19941207 | | |
| IL 81315 | A1 | 19911121 | IL 1987-81315 | 19870120 |
| DD 276873 | A5 | 19900314 | DD 1987-299387 | 19870121 |
| FI 8703503 | A | 19870812 | FI 1987-3503 | 19870812 |
| FI 85491 | B | 19920115 | | |
| FI 85491 | C | 19920427 | | |
| SU 1586519 | A3 | 19900815 | SU 1987-4203193 | 19870814 |
| DK 8704280 | A | 19870817 | DK 1987-4280 | 19870817 |
| DK 168821 | B1 | 19940620 | | |
| NO 8703453 | A | 19870817 | NO 1987-3453 | 19870817 |
| NO 170728 | B | 19920817 | | |
| NO 170728 | C | 19921125 | | |

L7 ANSWER 22 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 111011-59-7 REGISTRY
 CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-(diphenylamino)ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.
 CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-(diphenylamino)ethyl ester, P-oxide, monohydrochloride
 MF C33 H35 Cl2 N2 O5 P . Cl H
 SR CA
 LC STN Files: CA, CAPLUS
 DT.CA Caplus document type: Patent
 RL.P Roles from patents: PREP (Preparation)
 CRN (111011-70-2)



● HCl

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237009 Preparation of dihydropyridine-5-phosphonic acid cyclic propylene esters as antihypertensives and vasodilators. Seto, Kiyotomo; Tanaka, Sakuya; Sakoda, Ryoza; Sakai, Tosinori; Masuda, Yukinori (Nissan Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 230944 A1 19870805, 28 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1987-100602 19870119. PRIORITY: JP 1986-11255 19860122; JP 1986-12755 19860123; US 1986-851158 19860414; JP 1986-280159 19861125.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| PI EP 230944 | A1 | 19870805 | EP 1987-100602 | 19870119 |
| EP 230944 | B1 | 19900207 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| JP 62169795 | A2 | 19870725 | JP 1986-11255 | 19860122 |
| JP 06055751 | B4 | 19940727 | | |
| US 4885284 | A | 19891205 | US 1986-851158 | 19860414 |
| CA 1304379 | A1 | 19920630 | CA 1986-507085 | 19860418 |
| CN 87100286 | A | 19880113 | CN 1987-100286 | 19870114 |
| CN 1016063 | B | 19920401 | | |
| AU 8767635 | A1 | 19870723 | AU 1987-67635 | 19870116 |

| | | | | |
|---------------------------------------|----|----------|-----------------|----------|
| AU 589485 | B2 | 19891012 | | |
| AT 50263 | E | 19900215 | AT 1987-100602 | 19870119 |
| WO 8704439 | A1 | 19870730 | WO 1987-JP32 | 19870120 |
| W: BG, BR, DK, FI, HU, KR, NO, RO, SU | | | | |
| ZA 8700403 | A | 19870930 | ZA 1987-403 | 19870120 |
| HU 44570 | A2 | 19880328 | HU 1987-768 | 19870120 |
| HU 196605 | B | 19881228 | | |
| JP 63233992 | A2 | 19880929 | JP 1987-10230 | 19870120 |
| JP 06099458 | B4 | 19941207 | | |
| IL 81315 | A1 | 19911121 | IL 1987-81315 | 19870120 |
| DD 276873 | A5 | 19900314 | DD 1987-299387 | 19870121 |
| FI 8703503 | A | 19870812 | FI 1987-3503 | 19870812 |
| FI 85491 | B | 19920115 | | |
| FI 85491 | C | 19920427 | | |
| SU 1586519 | A3 | 19900815 | SU 1987-4203193 | 19870814 |
| DK 8704280 | A | 19870817 | DK 1987-4280 | 19870817 |
| DK 168821 | B1 | 19940620 | | |
| NO 8703453 | A | 19870817 | NO 1987-3453 | 19870817 |
| NO 170728 | B | 19920817 | | |
| NO 170728 | C | 19921125 | | |

L7 ANSWER 23 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 111011-57-5 REGISTRY
 CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(4,6-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 1-methyl-2-[phenyl(phenylmethyl)amino]ethyl ester, monohydrochloride (9CI)
 (CA INDEX NAME)

OTHER CA INDEX NAMES:

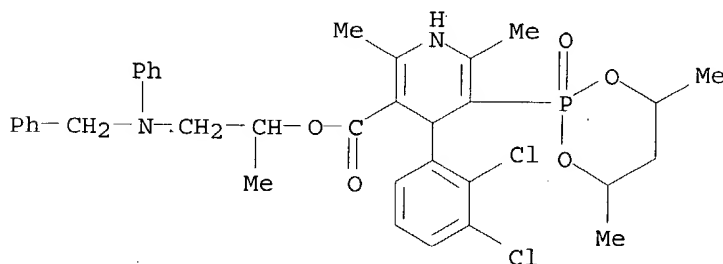
CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.
 CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(4,6-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 1-methyl-2-[phenyl(phenylmethyl)amino]ethyl ester, P-oxide, monohydrochloride
 MF C35 H39 Cl2 N2 O5 P . Cl H
 SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation)

CRN (111011-68-8)



● HCl

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237009 Preparation of dihydropyridine-5-phosphonic acid cyclic propylene esters as antihypertensives and vasodilators. Seto, Kiyotomo; Tanaka, Sakuya; Sakoda, Ryoza; Sakai, Tosinori; Masuda, Yukinori (Nissan Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 230944 A1 19870805, 28 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1987-100602 19870119. PRIORITY: JP 1986-11255 19860122; JP 1986-12755 19860123; US 1986-851158 19860414; JP 1986-280159 19861125.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 230944 | A1 | 19870805 | EP 1987-100602 | 19870119 |
| EP 230944 | B1 | 19900207 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| JP 62169795 | A2 | 19870725 | JP 1986-11255 | 19860122 |
| JP 06055751 | B4 | 19940727 | | |
| US 4885284 | A | 19891205 | US 1986-851158 | 19860414 |
| CA 1304379 | A1 | 19920630 | CA 1986-507085 | 19860418 |
| CN 87100286 | A | 19880113 | CN 1987-100286 | 19870114 |
| CN 1016063 | B | 19920401 | | |
| AU 8767635 | A1 | 19870723 | AU 1987-67635 | 19870116 |
| AU 589485 | B2 | 19891012 | | |
| AT 50263 | E | 19900215 | AT 1987-100602 | 19870119 |
| WO 8704439 | A1 | 19870730 | WO 1987-JP32 | 19870120 |
| W: BG, BR, DK, FI, HU, KR, NO, RO, SU | | | | |
| ZA 8700403 | A | 19870930 | ZA 1987-403 | 19870120 |
| HU 44570 | A2 | 19880328 | HU 1987-768 | 19870120 |
| HU 196605 | B | 19881228 | | |
| JP 63233992 | A2 | 19880929 | JP 1987-10230 | 19870120 |
| JP 06099458 | B4 | 19941207 | | |
| IL 81315 | A1 | 19911121 | IL 1987-81315 | 19870120 |
| DD 276873 | A5 | 19900314 | DD 1987-299387 | 19870121 |
| FI 8703503 | A | 19870812 | FI 1987-3503 | 19870812 |
| FI 85491 | B | 19920115 | | |
| FI 85491 | C | 19920427 | | |
| SU 1586519 | A3 | 19900815 | SU 1987-4203193 | 19870814 |
| DK 8704280 | A | 19870817 | DK 1987-4280 | 19870817 |
| DK 168821 | B1 | 19940620 | | |
| NO 8703453 | A | 19870817 | NO 1987-3453 | 19870817 |
| NO 170728 | B | 19920817 | | |
| NO 170728 | C | 19921125 | | |

L7 ANSWER 24 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 111011-55-3 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 3-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]propyl ester, dihydrochloride (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 3-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]propyl ester, P-oxide, dihydrochloride

MF C39 H44 Cl2 F2 N3 O5 P . 2 Cl H

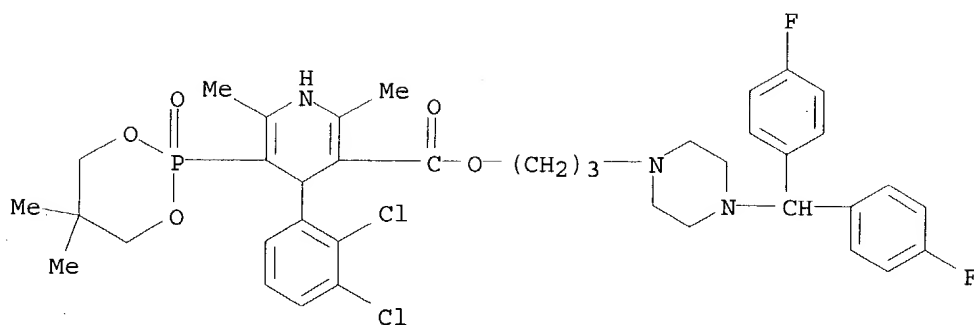
SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation)

CRN (111011-65-5)



● 2 HCl

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237009 Preparation of dihydropyridine-5-phosphonic acid cyclic propylene esters as antihypertensives and vasodilators. Seto, Kiyotomo; Tanaka, Sakuya; Sakoda, Ryoza; Sakai, Tosinori; Masuda, Yukinori (Nissan Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 230944 A1 19870805; 28 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1987-100602 19870119. PRIORITY: JP 1986-11255 19860122; JP 1986-12755 19860123; US 1986-851158 19860414; JP 1986-280159 19861125.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| PI | | | | |
| EP 230944 | A1 | 19870805 | EP 1987-100602 | 19870119 |
| EP 230944 | B1 | 19900207 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| JP 62169795 | A2 | 19870725 | JP 1986-11255 | 19860122 |
| JP 06055751 | B4 | 19940727 | | |
| US 4885284 | A | 19891205 | US 1986-851158 | 19860414 |
| CA 1304379 | A1 | 19920630 | CA 1986-507085 | 19860418 |
| CN 87100286 | A | 19880113 | CN 1987-100286 | 19870114 |
| CN 1016063 | B | 19920401 | | |
| AU 8767635 | A1 | 19870723 | AU 1987-67635 | 19870116 |
| AU 589485 | B2 | 19891012 | | |
| AT 50263 | E | 19900215 | AT 1987-100602 | 19870119 |
| WO 8704439 | A1 | 19870730 | WO 1987-JP32 | 19870120 |
| W: BG, BR, DK, FI, HU, KR, NO, RO, SU | | | | |
| ZA 8700403 | A | 19870930 | ZA 1987-403 | 19870120 |
| HU 44570 | A2 | 19880328 | HU 1987-768 | 19870120 |
| HU 196605 | B | 19881228 | | |
| JP 63233992 | A2 | 19880929 | JP 1987-10230 | 19870120 |
| JP 06099458 | B4 | 19941207 | | |
| IL 81315 | A1 | 19911121 | IL 1987-81315 | 19870120 |
| DD 276873 | A5 | 19900314 | DD 1987-299387 | 19870121 |
| FI 8703503 | A | 19870812 | FI 1987-3503 | 19870812 |
| FI 85491 | B | 19920115 | | |
| FI 85491 | C | 19920427 | | |
| SU 1586519 | A3 | 19900815 | SU 1987-4203193 | 19870814 |
| DK 8704280 | A | 19870817 | DK 1987-4280 | 19870817 |

09/801,933

Thomas McKenzie

| | | | | |
|------------|----|----------|--------------|----------|
| DK 168821 | B1 | 19940620 | | |
| NO 8703453 | A | 19870817 | NO 1987-3453 | 19870817 |
| NO 170728 | B | 19920817 | | |
| NO 170728 | C | 19921125 | | |

L7 ANSWER 25 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 111011-54-2 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[4-(diphenylmethyl)-1-piperazinyl]ethyl ester, dihydrochloride (9CI)
(CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[4-(diphenylmethyl)-1-piperazinyl]ethyl ester, P-oxide, dihydrochloride

MF C38 H44 Cl2 N3 O5 P . 2 Cl H

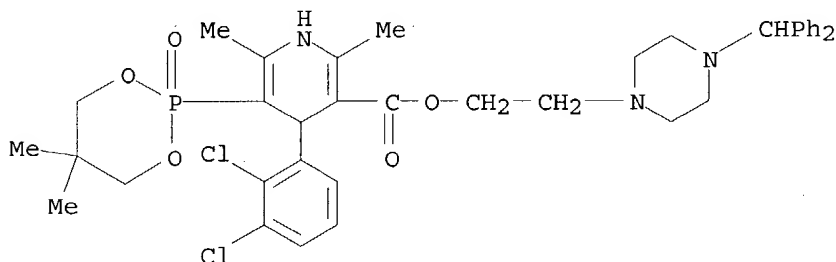
SR CA

LC STN Files: CA, CAPLUS

DT.CA CAPLUS document type: Patent

RL.P Roles from patents: PREP (Preparation)

CRN (111011-64-4)



● 2 HCl

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:237009 Preparation of dihydropyridine-5-phosphonic acid cyclic propylene esters as antihypertensives and vasodilators. Seto, Kiyotomo; Tanaka, Sakuya; Sakoda, Ryoza; Sakai, Tosinori; Masuda, Yukinori (Nissan Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 230944 A1 19870805, 28 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1987-100602 19870119. PRIORITY: JP 1986-11255 19860122; JP 1986-12755 19860123; US 1986-851158 19860414; JP 1986-280159 19861125.

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|----------|
| PI | EP 230944 | A1 | 19870805 | EP 1987-100602 | 19870119 |
| | EP 230944 | B1 | 19900207 | | |
| | R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| | JP 62169795 | A2 | 19870725 | JP 1986-11255 | 19860122 |
| | JP 06055751 | B4 | 19940727 | | |

| | | | | |
|---------------------------------------|----|----------|-----------------|----------|
| US 4885284 | A | 19891205 | US 1986-851158 | 19860414 |
| CA 1304379 | A1 | 19920630 | CA 1986-507085 | 19860418 |
| CN 87100286 | A | 19880113 | CN 1987-100286 | 19870114 |
| CN 1016063 | B | 19920401 | | |
| AU 8767635 | A1 | 19870723 | AU 1987-67635 | 19870116 |
| AU 589485 | B2 | 19891012 | | |
| AT 50263 | E | 19900215 | AT 1987-100602 | 19870119 |
| WO 8704439 | A1 | 19870730 | WO 1987-JP32 | 19870120 |
| W: BG, BR, DK, FI, HU, KR, NO, RO, SU | | | | |
| ZA 8700403 | A | 19870930 | ZA 1987-403 | 19870120 |
| HU 44570 | A2 | 19880328 | HU 1987-768 | 19870120 |
| HU 196605 | B | 19881228 | | |
| JP 63233992 | A2 | 19880929 | JP 1987-10230 | 19870120 |
| JP 06099458 | B4 | 19941207 | | |
| IL 81315 | A1 | 19911121 | IL 1987-81315 | 19870120 |
| DD 276873 | A5 | 19900314 | DD 1987-299387 | 19870121 |
| FI 8703503 | A | 19870812 | FI 1987-3503 | 19870812 |
| FI 85491 | B | 19920115 | | |
| FI 85491 | C | 19920427 | | |
| SU 1586519 | A3 | 19900815 | SU 1987-4203193 | 19870814 |
| DK 8704280 | A | 19870817 | DK 1987-4280 | 19870817 |
| DK 168821 | B1 | 19940620 | | |
| NO 8703453 | A | 19870817 | NO 1987-3453 | 19870817 |
| NO 170728 | B | 19920817 | | |
| NO 170728 | C | 19921125 | | |

L7 ANSWER 26 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 107563-35-9 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-1-ethyl-1,4-dihydro-2,6-dimethyl-5-(2-oxido-1,3,2-dioxaphosphorinan-2-yl)-, methyl ester (9CI)
(CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(1,3,2-dioxaphosphorinan-2-yl)-1-ethyl-1,4-dihydro-2,6-dimethyl-, methyl ester, P-oxide

FS 3D CONCORD

MF C20 H24 Cl2 N O5 P

SR CA

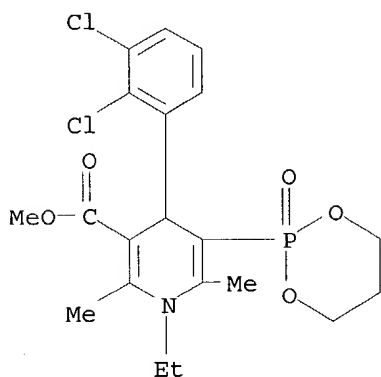
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT

(*File contains numerically searchable property data)

DT.CA Caplus document type: Journal; Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 110:23995 Syntheses and antihypertensive activities of 1,4-dihydropyridine-5-phosphonate derivatives. III. Morita, Iwao; Haruta, Yuko; Tomita, Toshio; Tsuda, Masami; Kandori, Kazuhisa; Kise, Masahiro; Kimura, Kiyoshi (Res. Lab., Nippon Shinyaku Co., Ltd., Kyoto, 601, Japan). Chemical & Pharmaceutical Bulletin, 35(12), 4819-28 (English) 1987. CODEN: CPBTAL. ISSN: 0009-2363.

REFERENCE 2: 106:156672 Dihydropyridylphosphonates. Kimura, Kiyoshi;
Morita, Iwao (Nippon Shinyaku Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho
JP 61257995 A2 19861115 Showa, 20 pp. (Japanese). CODEN: JKXXAF.
APPLICATION: JP 1985-99041 19850509.

| APPLICATION NO. 1985-99041-19850509 | | | APPLICATION NO. | DATE |
|-------------------------------------|------|----------|-----------------|----------|
| PATENT NO. | KIND | DATE | | |
| JP 61257995 | A2 | 19861115 | JP 1985-99041 | 19850509 |
| JP 04055438 | B4 | 19920903 | | |

L7 ANSWER 27 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 107563-10-0 REGISTRY

3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(4,5-dimethyl-2-oxido-1,3,2-dioxaphospholan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[methyl(phenylmethyl)amino]ethyl ester, hydrochloride (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphospholane, 3-pyridinecarboxylic acid deriv.

3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(4,5-dimethyl-1,3,2-dioxaphospholan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[methyl(phenylmethyl)amino]ethyl ester, P-oxide, hydrochloride

MF C28 H33 Cl2 N2 O5 P . x Cl H

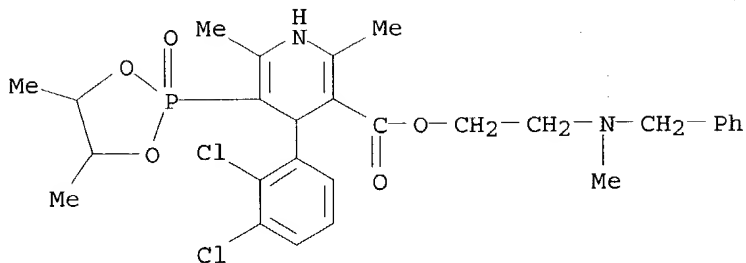
SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation)

CRN (107563-09-7)



●x HCl

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 106:156671 Dihydropyridylphosphonic acid ethylene ester derivatives. Seto, Kiyotomo; Kamikawaji, Masumasa; Sakota, Ryoza; Tanaka, Sakuya (Nissan Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 61254596 A2 19861112 Showa, 10 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1985-95152 19850502.

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 61254596 | A2 | 19861112 | JP 1985-95152 | 19850502 |
| | JP 04053871 | B4 | 19920827 | | |

L7 ANSWER 28 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 107563-09-7 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(4,5-dimethyl-2-oxido-1,3,2-dioxaphospholan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[methyl(phenylmethyl)amino]ethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphospholane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(4,5-dimethyl-1,3,2-dioxaphospholan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[methyl(phenylmethyl)amino]ethyl ester, P-oxide

FS 3D CONCORD

MF C28 H33 Cl2 N2 O5 P

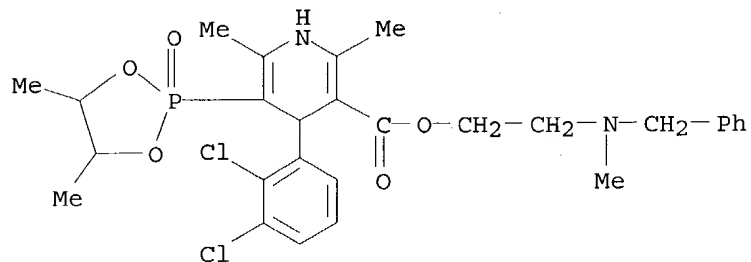
CI COM

SR CA

LC STN Files: CA, CAPLUS

DT.CA Caplus document type: Patent

RL.P Roles from patents: PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 106:156671 Dihydropyridylphosphonic acid ethylene ester derivatives. Seto, Kiyotomo; Kamikawaji, Masumasa; Sakota, Ryoza; Tanaka, Sakuya (Nissan Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 61254596 A2 19861112 Showa, 10 pp. (Japanese). CODEN: JKXXAF.
 APPLICATION: JP 1985-95152 19850502.

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 61254596 | A2 | 19861112 | JP 1985-95152 | 19850502 |
| | JP 04053871 | B4 | 19920827 | | |

L7 ANSWER 29 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 106937-05-7 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(1,3-dimethyl-2-oxido-1,3,2-diazaphospholidin-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[methyl(phenylmethyl)amino]ethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Diazaphospholidine, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(1,3-dimethyl-1,3,2-diazaphospholidin-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[methyl(phenylmethyl)amino]ethyl ester, P-oxide

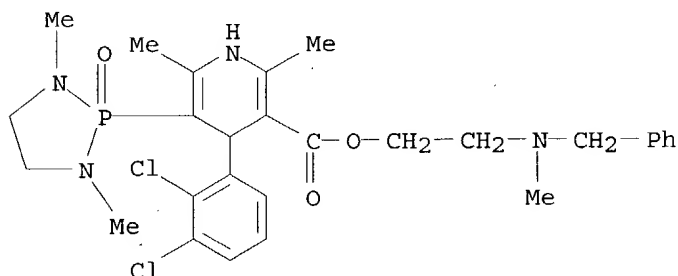
MF C28 H35 Cl2 N4 O3 P

SR CA

LC STN Files: CA, CAPLUS

DT.CA Caplus document type: Patent

RL.P Roles from patents: PREP (Preparation)



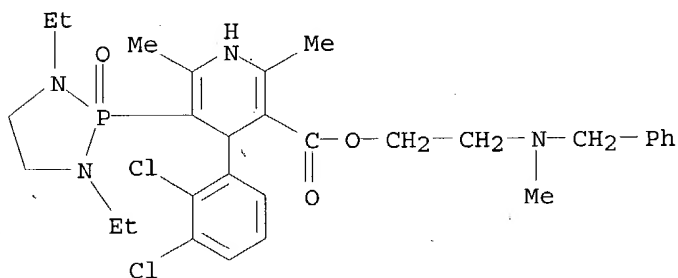
1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 106:102546 Dihydropyridine-5-phosphonic acid diamide derivatives. Kamikawaji, Masuaki; Seto, Kiyotomo; Sakota, Ryoza; Tanaka, Sakuya (Nissan Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 61210092 A2 19860918 Showa, 7 pp. (Japanese). CODEN: JKXXAF.
 APPLICATION: JP 1985-50796 19850314.

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 61210092 | A2 | 19860918 | JP 1985-50796 | 19850314 |
| | JP 04053870 | B4 | 19920827 | | |

L7 ANSWER 30 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 106936-88-3 REGISTRY
 CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(1,3-diethyl-2-oxido-1,3,2-diazaphospholidin-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[methyl(phenylmethyl)amino]ethyl ester (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 1,3,2-Diazaphospholidine, 3-pyridinecarboxylic acid deriv.
 CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(1,3-diethyl-1,3,2-diazaphospholidin-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[methyl(phenylmethyl)amino]ethyl ester, P-oxide
 MF C30 H39 Cl2 N4 O3 P
 SR CA
 LC STN Files: CA, CAPLUS
 DT.CA CAplus document type: Patent
 RL.P Roles from patents: PREP (Preparation)



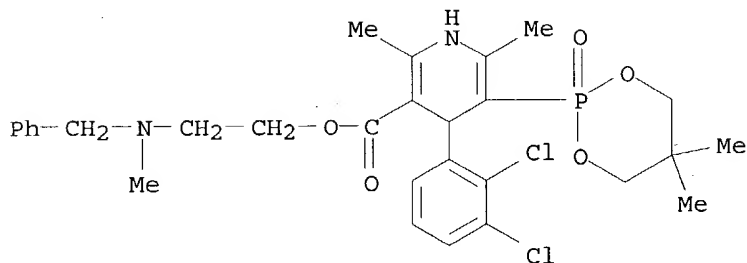
1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 106:102546 Dihydropyridine-5-phosphonic acid diamide derivatives. Kamikawaji, Masuaki; Seto, Kiyotomo; Sakota, Ryoze; Tanaka, Sakuya (Nissan Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 61210092 A2 19860918 Showa, 7 pp. (Japanese). CODEN: JKXXAF.
 APPLICATION: JP 1985-50796 19850314.
 PATENT NO. KIND DATE APPLICATION NO. DATE

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| JP 61210092 | A2 | 19860918 | JP 1985-50796 | 19850314 |
| JP 04053870 | B4 | 19920827 | | |

L7 ANSWER 31 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 102098-28-2 REGISTRY
 CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[methyl(phenylmethyl)amino]ethyl ester (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.
 CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, 2-[methyl(phenylmethyl)amino]ethyl ester, P-oxide
 FS 3D CONCORD
 MF C29 H35 Cl2 N2 O5 P
 CI COM
 SR CA
 LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, USPATFULL
 (*File contains numerically searchable property data)
 DT.CA CAplus document type: Journal; Patent
 RL.P Roles from patents: PREP (Preparation)
 RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation);

RACT (Reactant or reagent); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 118:124668 Synthesis of 1,4-dihydropyridine-5-phosphonates and their calcium-antagonistic and antihypertensive activities: novel calcium-antagonist 2-[benzyl(phenyl)amino]ethyl 5-(5,5-dimethyl-2-oxo-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-4-(3-nitrophenyl)-3-pyridinecarboxylate hydrochloride ethanol (NZ-105) and its crystal structure. Sakoda, Ryozi; Kamikawaji, Yoshimasa; Seto, Kiyotomo (Cent. Res. Inst., Nissan Chem. Ind. Co., Ltd., Funabashi, 274, Japan). Chemical & Pharmaceutical Bulletin, 40(9), 2362-9 (English) 1992. CODEN: CPBTAL. ISSN: 0009-2363.

REFERENCE 2: 109:93169 Synthesis and antihypertensive activities of 1,4-dihydropyridine-5-phosphonate derivatives. II. Morita, Iwao; Kunitomo, Katsutoshi; Tsuda, Masami; Tada, Shinichi; Kise, Masahiro; Kimura, Kiyoshi (Res. Lab., Nippon Shinyaku Co., Ltd., Kyoto, 601, Japan). Chemical & Pharmaceutical Bulletin, 35(10), 4144-54 (English) 1987. CODEN: CPBTAL. ISSN: 0009-2363.

REFERENCE 3: 104:207449 Pyridyldioxaphosphorinane derivatives. Kimura, Kiyoshi; Morita, Iwao (Nippon Shinyaku Co., Ltd., Japan). Eur. Pat. Appl. EP 159040 A2 19851023, 58 pp. DESIGNATED STATES: R: AT, CH, DE, LI. (English). CODEN: EPXXDW. APPLICATION: EP 1985-104723 19850418. PRIORITY: JP 1984-79560 19840419.

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------------|------|----------|-----------------|----------|
| PI | EP 159040 | A2 | 19851023 | EP 1985-104723 | 19850418 |
| | EP 159040 | A3 | 19880817 | | |
| | EP 159040 | B1 | 19921209 | | |
| | R: AT, CH, DE, LI | | | | |
| | JP 60248693 | A2 | 19851209 | JP 1984-79560 | 19840419 |
| | JP 02059835 | B4 | 19901213 | | |
| | GB 2157695 | A1 | 19851030 | GB 1985-7897 | 19850326 |
| | NL 8500909 | A | 19851118 | NL 1985-909 | 19850328 |
| | FR 2563222 | A1 | 19851025 | FR 1985-5174 | 19850404 |
| | FR 2563222 | B1 | 19890609 | | |
| | ZA 8502591 | A | 19860129 | ZA 1985-2591 | 19850404 |
| | BE 902210 | A1 | 19851017 | BE 1985-214853 | 19850417 |
| | SE 8501882 | A | 19851020 | SE 1985-1882 | 19850417 |

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| SE 464028 | B | 19910225 | | |
| SE 464028 | C | 19910627 | | |
| US 5036059 | A | 19910730 | US 1985-724019 | 19850417 |
| AU 8541405 | A1 | 19851024 | AU 1985-41405 | 19850418 |
| AU 570552 | B2 | 19880317 | | |
| ES 542378 | A1 | 19860401 | ES 1985-542378 | 19850418 |
| AT 83237 | E | 19921215 | AT 1985-104723 | 19850418 |

L7 ANSWER 32 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 102098-27-1 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, methyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, methyl ester, P-oxide

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MF C20 H24 Cl2 N O5 P

SR CA

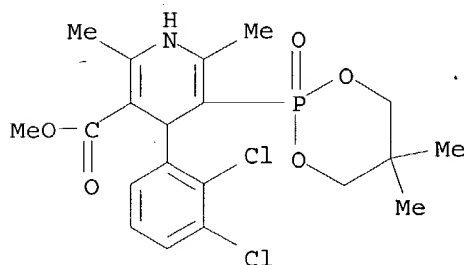
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, USPATFULL

(*File contains numerically searchable property data)

DT.CA Caplus document type: Journal; Patent

RL.P Roles from patents: PREP (Preparation)

RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 109:93169 Synthesis and antihypertensive activities of 1,4-dihydropyridine-5-phosphonate derivatives. II. Morita, Iwao; Kunitomo, Katsutoshi; Tsuda, Masami; Tada, Shinichi; Kise, Masahiro; Kimura, Kiyoshi (Res. Lab., Nippon Shinyaku Co., Ltd., Kyoto, 601, Japan). Chemical & Pharmaceutical Bulletin, 35(10), 4144-54 (English) 1987. CODEN: CPBTAL. ISSN: 0009-2363.

REFERENCE 2: 104:207449 Pyridyldioxaphosphorinane derivatives. Kimura, Kiyoshi; Morita, Iwao (Nippon Shinyaku Co., Ltd., Japan). Eur. Pat. Appl. EP 159040 A2 19851023, 58 pp. DESIGNATED STATES: R: AT, CH, DE, LI. (English). CODEN: EPXXDW. APPLICATION: EP 1985-104723 19850418. PRIORITY: JP 1984-79560 19840419.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| PI | EP 159040 | A2 | 19851023 | EP 1985-104723 | 19850418 |
| | EP 159040 | A3 | 19880817 | | |
| | EP 159040 | B1 | 19921209 | | |
| | R: AT, CH, DE, LI | | | | |
| | JP 60248693 | A2 | 19851209 | JP 1984-79560 | 19840419 |
| | JP 02059835 | B4 | 19901213 | | |
| | GB 2157695 | A1 | 19851030 | GB 1985-7897 | 19850326 |
| | NL 8500909 | A | 19851118 | NL 1985-909 | 19850328 |
| | FR 2563222 | A1 | 19851025 | FR 1985-5174 | 19850404 |
| | FR 2563222 | B1 | 19890609 | | |
| | ZA 8502591 | A | 19860129 | ZA 1985-2591 | 19850404 |
| | BE 902210 | A1 | 19851017 | BE 1985-214853 | 19850417 |
| | SE 8501882 | A | 19851020 | SE 1985-1882 | 19850417 |
| | SE 464028 | B | 19910225 | | |
| | SE 464028 | C | 19910627 | | |
| | US 5036059 | A | 19910730 | US 1985-724019 | 19850417 |
| | AU 8541405 | A1 | 19851024 | AU 1985-41405 | 19850418 |
| | AU 570552 | B2 | 19880317 | | |
| | ES 542378 | A1 | 19860401 | ES 1985-542378 | 19850418 |
| | AT 83237 | E | 19921215 | AT 1985-104723 | 19850418 |

L7 ANSWER 33 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 102098-26-0 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-1,4-dihydro-2,6-dimethyl-5-(2-oxido-1,3,2-dioxaphosphorinan-2-yl)-, ethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, ethyl ester, P-oxide

FS 3D CONCORD

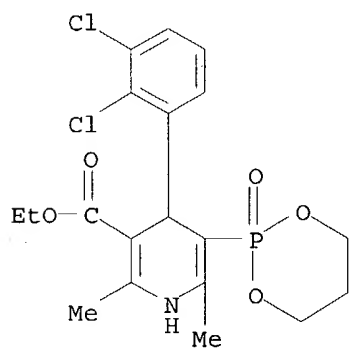
MF C19 H22 Cl2 N O5 P

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA Caplus document type: Patent

RL.P Roles from patents: PREP (Preparation)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 104:207449 Pyridyldioxaphosphorinane derivatives. Kimura, Kiyoshi; Morita, Iwao (Nippon Shinyaku Co., Ltd., Japan). Eur. Pat. Appl.

EP 159040 A2 19851023, 58 pp. DESIGNATED STATES: R: AT, CH, DE, LI.
(English). CODEN: EPXXDW. APPLICATION: EP 1985-104723 19850418.
PRIORITY: JP 1984-79560 19840419.

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------------|------|----------|-----------------|----------|
| PI | EP 159040 | A2 | 19851023 | EP 1985-104723 | 19850418 |
| | EP 159040 | A3 | 19880817 | | |
| | EP 159040 | B1 | 19921209 | | |
| | R: AT, CH, DE, LI | | | | |
| | JP 60248693 | A2 | 19851209 | JP 1984-79560 | 19840419 |
| | JP 02059835 | B4 | 19901213 | | |
| | GB 2157695 | A1 | 19851030 | GB 1985-7897 | 19850326 |
| | NL 8500909 | A | 19851118 | NL 1985-909 | 19850328 |
| | FR 2563222 | A1 | 19851025 | FR 1985-5174 | 19850404 |
| | FR 2563222 | B1 | 19890609 | | |
| | ZA 8502591 | A | 19860129 | ZA 1985-2591 | 19850404 |
| | BE 902210 | A1 | 19851017 | BE 1985-214853 | 19850417 |
| | SE 8501882 | A | 19851020 | SE 1985-1882 | 19850417 |
| | SE 464028 | B | 19910225 | | |
| | SE 464028 | C | 19910627 | | |
| | US 5036059 | A | 19910730 | US 1985-724019 | 19850417 |
| | AU 8541405 | A1 | 19851024 | AU 1985-41405 | 19850418 |
| | AU 570552 | B2 | 19880317 | | |
| | ES 542378 | A1 | 19860401 | ES 1985-542378 | 19850418 |
| | AT 83237 | E | 19921215 | AT 1985-104723 | 19850418 |

L7 ANSWER 34 OF 34 REGISTRY COPYRIGHT 2004 ACS on STN

RN 102098-25-9 REGISTRY

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-1,4-dihydro-2,6-dimethyl-5-(2-oxido-1,3,2-dioxaphosphorinan-2-yl)-, methyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,2-Dioxaphosphorinane, 3-pyridinecarboxylic acid deriv.

CN 3-Pyridinecarboxylic acid, 4-(2,3-dichlorophenyl)-5-(1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-, methyl ester, P-oxide

FS 3D CONCORD

MF C18 H20 Cl2 N O5 P

SR CA

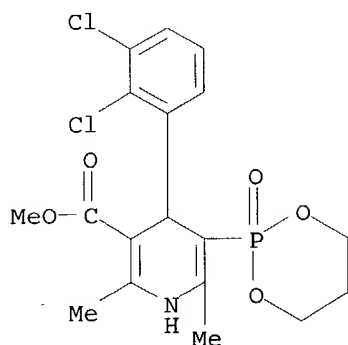
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, USPATFULL

(*File contains numerically searchable property data)

DT.CA Caplus document type: Journal; Patent

RL.P Roles from patents: PREP (Preparation)

RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 109:93169 Synthesis and antihypertensive activities of 1,4-dihydropyridine-5-phosphonate derivatives. II. Morita, Iwao; Kunimoto, Katsutoshi; Tsuda, Masami; Tada, Shinichi; Kise, Masahiro; Kimura, Kiyoshi (Res. Lab., Nippon Shinyaku Co., Ltd., Kyoto, 601, Japan). Chemical & Pharmaceutical Bulletin, 35(10), 4144-54 (English) 1987. CODEN: CPBTAL. ISSN: 0009-2363.

REFERENCE 2: 104:207449 Pyridyldioxaphosphorinane derivatives. Kimura, Kiyoshi; Morita, Iwao (Nippon Shinyaku Co., Ltd., Japan). Eur. Pat. Appl. EP 159040 A2 19851023, 58 pp. DESIGNATED STATES: R: AT, CH, DE, LI. (English). CODEN: EPXXDW. APPLICATION: EP 1985-104723 19850418. PRIORITY: JP 1984-79560 19840419.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------------|------|----------|-----------------|----------|
| PI EP 159040 | A2 | 19851023 | EP 1985-104723 | 19850418 |
| EP 159040 | A3 | 19880817 | | |
| EP 159040 | B1 | 19921209 | | |
| R: AT, CH, DE, LI | | | | |
| JP 60248693 | A2 | 19851209 | JP 1984-79560 | 19840419 |
| JP 02059835 | B4 | 19901213 | | |
| GB 2157695 | A1 | 19851030 | GB 1985-7897 | 19850326 |
| NL 8500909 | A | 19851118 | NL 1985-909 | 19850328 |
| FR 2563222 | A1 | 19851025 | FR 1985-5174 | 19850404 |
| FR 2563222 | B1 | 19890609 | | |
| ZA 8502591 | A | 19860129 | ZA 1985-2591 | 19850404 |
| BE 902210 | A1 | 19851017 | BE 1985-214853 | 19850417 |
| SE 8501882 | A | 19851020 | SE 1985-1882 | 19850417 |
| SE 464028 | B | 19910225 | | |
| SE 464028 | C | 19910627 | | |
| US 5036059 | A | 19910730 | US 1985-724019 | 19850417 |
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| ES 542378 | A1 | 19860401 | ES 1985-542378 | 19850418 |
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Thomas McKenzie

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